*Education . . .*
*a process by which*
*a person begins to learn*
*how to learn.*

*Peter Ustinov*

West Chester University

# Undergraduate Catalog 1987-1988

# Communications Directory

| | |
|---|---|
| MAILING ADDRESS: | West Chester University, West Chester, Pa 19383 |
| TELEPHONES: | Dial 436 plus number in parentheses. For offices not shown here, call the University Information Center. (215) 436-1000. |
| Academic Advising | Director for Academic Advising, Lawrence Center (3505) |
| Academic Development Program | Director of Academic Development Program, Lawrence Center (3505) |
| Admissions/Undergraduate Catalogs | Director of Admissions, 110 West Rosedale Avenue (3411) |
| Affirmative Action | Director of Affirmative Action (2433) |
| Book Store | Student Services Inc., Sykes Union Building (2242) |
| Careers/Placement | Director of Career Development Center, Lawrence Center (2501) |
| Continuing Education | Dean, University College, Elsie Bull Center (3550)<br>Director, Evening Studies Center, Elsie Bull Center (3550)<br>Director, Community Education, Elsie Bull Center (3550) |
| Counseling | Counseling Center, Lawrence Center (2301) |
| Cultural Affairs and University Events | Co-Curricular Programs/Program Board, Sykes Union Building (2983) |
| Financial Aid/ Work Study | Director of Financial Aid, Elsie Bull Center (2627) |
| Graduate Studies/ Catalogs | Dean of Graduate Studies and Sponsored Research, Old Library (2943) |
| Housing | Student Development Office, Sykes Union Building (3305) |
| Student Services Inc. | Sykes Union Building (2955) |
| Police | Public Safety Department, Peoples Maintenance Building (3311) |
| Public Relations | Director of Public Relations, Philips Memorial (3383) |
| Scheduling/Registration | University Registrar, Elsie Bull Center (3541) |
| Student Accounts | Student Accounts Office, Elsie Bull Center (2552) |
| Summer Sessions | Director of Summer Sessions, Elsie Bull Center (2230) |
| Teacher Certification | Teacher Certification Office, Anderson Hall (2426) |

## Accreditation

West Chester University is accredited by The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The National Athletic Training Association, The National Association of Schools of Music, The Council on Social Work Education, The National League for Nursing, The Society for Public Health Education, The American Chemical Society, The Commission on Accreditation in Clinical Chemistry, and the Joint Review Committee for Respiratory Therapy Education. West Chester University has been given program approval by the Department of Education of the Commonwealth of Pennsylvania for the certification of teachers.

## Non-Discrimination/Affirmative Action Policy

*West Chester University is committed to providing leadership in extending equal opportunities to all individuals. Accordingly, the University will continue to make every effort to provide these rights to all persons regardless of race, color, religious creed, lifestyle, handicap, ancestry, national origin, union membership, age or sex. This policy applies to all members of the University community including students, faculty, staff and administrators. It also applies to all applicants for admission or employment and all participants in University-sponsored activities.*

*This policy is in compliance with federal and state laws, including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendment of 1972, Section 504 of the Rehabilitation Act of 1973 and Executive Order of the Governor of Pennsylvania.*

*Any individual having suggestions, problems, complaints, or grievances with regard to equal opportunity or affirmative action is encouraged to contact the director of affirmative action in Smith House, 1st floor, (215) 436-2433.*

## Sexual Harassment Policy

*West Chester University is committed to equality of opportunity and freedom from discrimination for all its students and employees. Based on this commitment and the recognition that sexual harassment is a form of discrimination which is of a growing concern to the higher education community, the University provides the following policy:*

*Harassment on the basis of sex, is a violation to Title VII of the U.S. Civil Rights Act, Title IX of the Educational Amendments of 1972, and of the Pennsylvania Human Relations Act. Because West Chester University is committed to establishing an environment free from discrimination and harassment, sexual harassment will not be tolerated in any form. Upon official filing of a complaint, immediate investigation will be made culminating in appropriate corrective action where warranted which may include termination of the relationship with the University.*

*Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature occurring on campus or at any co-curricular or extracurricular activity sponsored by the University. Sexual harassment occurs when:*

1. *submission of such conduct is made either explicitly or implicitly a term or condition of an individual's employment, or of a student's academic status or treatment;*
2. *submission to or rejection of such conduct by an individual is used on the basis for academic or employment decisions affecting such an individual, or*
3. *such conduct has the purpose or effect of unreasonably interfering with an individual's extracurricular activities, work, academic performance or creating an intimidating, hostile, or offensive living, working or academic environment.*

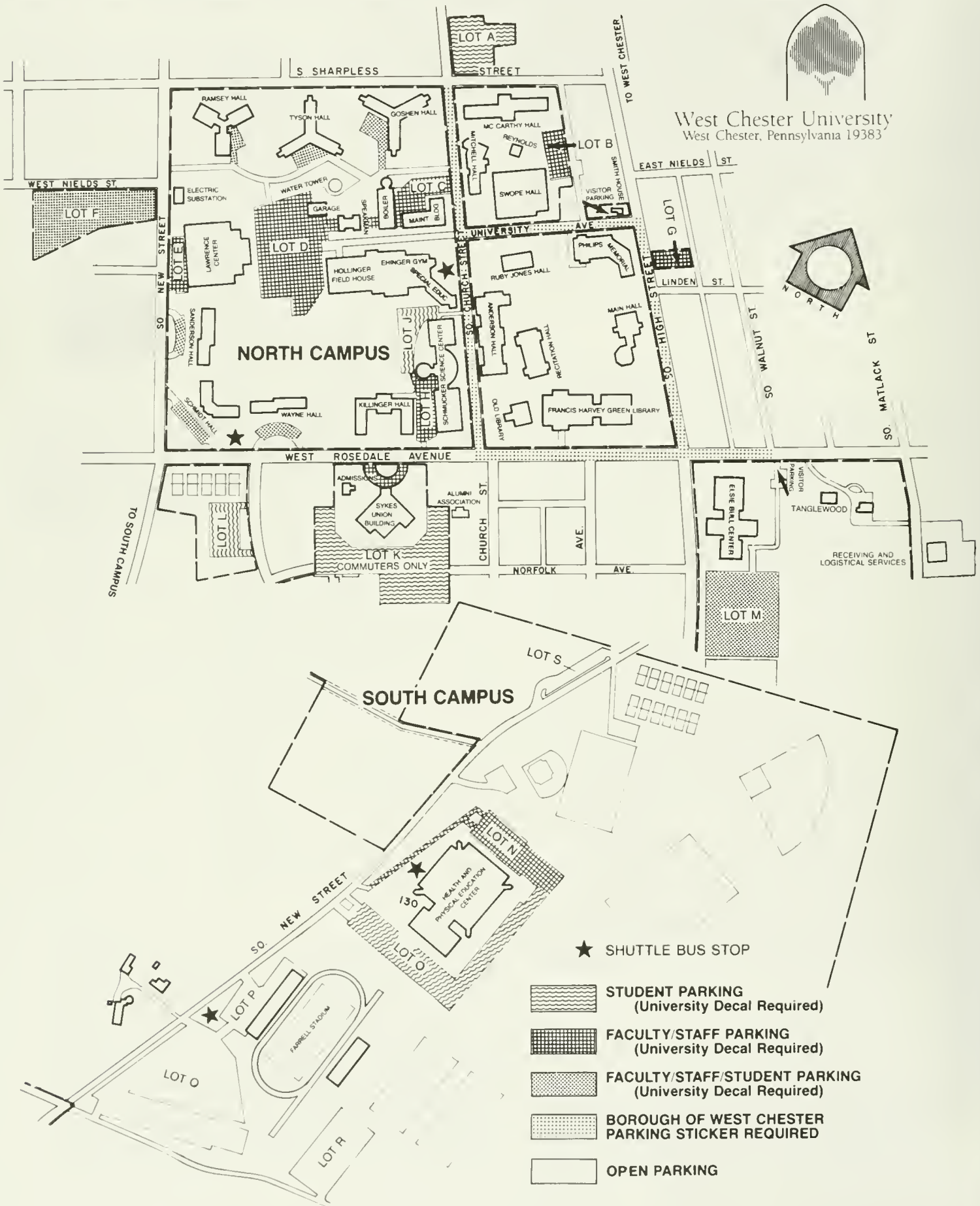
*Individuals who believe themselves to be the victims of sexual harassment, or who have questions about the University's policy on this matter should contact the director of affirmative action, Smith House, 1st Floor, (215) 436-2433.*

**The provisions of this catalog are not to be regarded as an irrevocable contract between the student and the University. West Chester University reserves the right to change any provisions or requirements at any time.**

West Chester University

# Undergraduate Catalog 1987-1988

# Campus Map


West Chester University
West Chester, Pennsylvania 19383
NORTH CAMPUS
SOUTH CAMPUS
S SHARPLESS
WEST NIELDS ST
EAST NIELDS ST
LOT A
LOT B
LOT C
LOT D
LOT E
LOT F
LOT G
LOT J
LOT K
COMMUTERS ONLY
LOT L
LOT M
LOT N
LOT O
LOT P
LOT R
LOT S
RAMSEY HALL
TYSON HALL
GOSHEN HALL
MC CARTHY HALL
REYNOLDS
MITCHELL HALL
SWOPE HALL
VISITOR PARKING
SMITH HOUSE
ELECTRIC SUBSTATION
WATER TOWER
GARAGE
SPECULATION
BOILER
MAINT BLDG
LAWRENCE CENTER
HOLLINGER FIELD HOUSE
EHINGER GYM
RECREATIONAL EDUC.
PHILIPS MEMORIAL
RUBY JONES HALL
ANDERSON HALL
RECITATION HALL
MAIN HALL
SANDERSON HALL
SCHMUCKER SCIENCE CENTER
KILLINGER HALL
WAYNE HALL
SCHMIDT HALL
OLD LIBRARY
FRANCIS HARVEY GREEN LIBRARY
ADMISSIONS
SYKES UNION BUILDING
ALUMNI ASSOCIATION
ELSIE BULL CENTER
TANGLEWOOD
RECEIVING AND LOGISTICAL SERVICES
HEALTH AND PHYSICAL EDUCATION CENTER
FARRELL STADIUM
TO WEST CHESTER
TO SOUTH CAMPUS
SO NEW STREET
SO CHURCH STREET
SO HIGH STREET
SO WALNUT ST
SO MATLACK ST
UNIVERSITY AVE
LINDEN ST
NORTH
WEST ROSEDALE AVENUE
CHURCH ST
NORFOLK AVE
AVE
130
SHUTTLE BUS STOP
STUDENT PARKING
(University Decal Required)
FACULTY/STAFF PARKING
(University Decal Required)
FACULTY/STAFF/STUDENT PARKING
(University Decal Required)
BOROUGH OF WEST CHESTER
PARKING STICKER REQUIRED
OPEN PARKING

# Contents


Communications Directory ..... inside front cover
Campus Map ..... 2
Introducing West Chester ..... 5
Academic Affairs ..... 6
Campus and Facilities ..... 10
Admission to West Chester ..... 12
Fees and Expenses ..... 13
Financial Aid ..... 17
Student Affairs ..... 23
Degree Requirements ..... 30
Academic Policies and Procedures ..... 33
Structure of the University ..... 39
Undergraduate Programs at West Chester ..... 39
Programs of Study and Course Offerings ..... 40
Administration ..... 123
Faculty ..... 125
Index ..... 134
Academic Calendar ..... inside back cover

# Introducing West Chester

Quality education at a reasonable price . . . this is the goal of West Chester University, the second largest of the fourteen institutions of higher learning which are the State System of Higher Education of the Commonwealth of Pennsylvania. A comprehensive and multi-purpose university, West Chester serves individuals of all ages with a variety of programs to fill their educational needs.

West Chester offers degrees in the arts and sciences, teacher training and certification, preparation for advanced study in fields such as medicine and law, education for specific professions, and continuing education. See page 39–40 for a complete listing of undergraduate degree programs.

Total enrollment at West Chester includes about 8,900 undergraduate students and over 1,500 graduate students. While most undergraduates are recent high school graduates preparing for career objectives, many others are older individuals including veterans and homemakers, who either never before had the opportunity for a college education, or whose schooling was interrupted.

Most students are residents of Pennsylvania, but students from other states and foreign countries are welcome. West Chester's student body represents a cross section of many ethnic, racial, and religious groups and includes students from all economic levels.

Like the world around it, West Chester University is constantly changing and growing. The school continues to broaden and modify the nature and number of its programs to reflect the needs of its students in their endeavor to prepare themselves for success and fulfillment in life.

## Philosophy of the University

West Chester University is dedicated to the student: here each person can develop the capacity to understand the intellectual, social, cultural, and physical environments in which he or she lives. We strive to promote critical thinking, clear and effective expression, and creativity. In addition, we attempt to create an atmosphere in which each student can develop a sense of his or her distinctive identity and, at the same time, a sense of community and humanity. In our teaching, research, and community service activities, we respond to the changing needs of society, and we seek to prepare students to serve effectively in their chosen professions and to lead lives that will be creative, stimulating, and satisfying.

## History of the University

Although its founding year is 1871, the University in fact has deeper roots tracing from West Chester Academy, a private, state-aided school which existed from 1812 to 1869. The academy enjoyed strong support from the highly intellectual Chester County Cabinet of the Natural Sciences of the pre-Civil War decades. It was recognized as one of Pennsylvania's leading preparatory schools, and its experience in teacher-training laid the groundwork for the normal school years that were to follow.

As the state began to take increasing responsibility for public education, the academy was transformed into West Chester State Normal School, still privately owned but state-certified. The normal school admitted its first class of 160 students on September 25, 1871. In 1913, West Chester became the first of the normal schools to be owned outright by the Commonwealth.

West Chester became West Chester State Teachers College in 1927 when Pennsylvania initiated a four-year program of teacher education. In 1960, as the Commonwealth paved the way for liberal arts programs in its college system, West Chester was renamed West Chester State College, and two years later introduced the liberal arts program which turned the one-time academy into a comprehensive college.

In recognition of the historic merit of the campus, in 1981 the West Chester State College Quadrangle Historic District was placed on the National Register of Historic Places. The buildings included in this historic district are Philips Memorial Hall, Ruby Jones Hall, Recitation Hall, and the Old Library. Except for Philips, these buildings are all constructed of native Chester County serpentine stone.

West Chester State passed another major milestone with passage of the State System of Higher Education bill. West Chester and the other 12 state colleges became universities in the State System of Higher Education on July 1, 1983. Along with its new name — West Chester University of Pennsylvania of the State System of Higher Education — the institution acquired a new system of governance and the opportunity to expand its degree programs.

## Location of the University

West Chester University is in West Chester, a town which has been the seat of government in Chester County since 1786. With a population of about 20,000, the borough is small enough to have the pleasant aspects of a tree-shaded American town, large enough to contain essential services and the substance of a vigorous community, and old enough to give the student first-hand touch with America's early history. Students may walk to West Chester's many churches. The town has excellent stores and shops and a fine hospital.

West Chester was settled in the early 18th century, principally by members of the Society of Friends. In the heart of town is its courthouse, a classical revival building designed in the 1840's by Thomas U. Walter, one of the architects for the Capitol in Washington, D.C.

West Chester today is part of the rapidly growing suburban complex surrounding Philadelphia and offers interesting opportunities for the study of local, county, and regional government in a period of change and growth.

Philadelphia is 25 miles to the east and Wilmington 17 miles to the south, putting the libraries, museums, and other cultural and historical resources of both cities in easy reach. Valley Forge, the Brandywine Battlefield, Longwood Gardens, and other historical attractions are near West Chester. New York and Washington are easily accessible by car or train.

### How to Reach West Chester

The Borough of West Chester is easily accessible from all directions both by car and public transportation. Route 3, the West Chester Pike, leads directly into town from center-city Philadelphia. From the Pennsylvania Turnpike, motorists traveling west should take Route 202 south from the Valley Forge Interchange while those traveling east can arrive via Route 100 south from the Downingtown Interchange. From the south, Route 202 from Wilmington and Routes 100 and 52 from U.S. Route 1 all lead to West Chester.

Public transportation is available from Philadelphia and other nearby communities.

Information on public transportation and carpooling is available from the Office of Off-Campus Life, Sykes Union Building.

# Academic Affairs

### Undergraduate Programs

West Chester University offers teaching certification programs, local certificate programs, and programs of study leading to the Associate of Arts, Associate of Science, Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science in Education, Bachelor of Science, and Bachelor of Science in Nursing. A complete list of undergraduate degree programs appears on pages 39–40. Programs of study at the graduate level are also available. These are listed on pages 9-10 and are described in detail in the graduate catalog.

### Pre-Professional Study and Advising

West Chester University recognizes that some students will select a career goal which will require pursuit of an academic degree after the baccalaureate, either in a graduate school or at a professional school. Students with such goals are encouraged to discuss them with appropriate members of the faculty.

**Pre-Law.** Students who are contemplating going on to law school should take part in the pre-law advisory program, conducted by the Department of Government and Planning in order to select major and elective courses which will provide a sound foundation for later studies in law school. The program of study pursued by the pre-law student will depend in part upon the interests of the student and upon the student's breadth of competence in oral and written communication. Pre-law students may be found in a variety of major fields of study. They are encouraged to participate in the Law Club.

**Pre-Theology.** Pre-seminary students tend to major in religious studies under the auspices of the Department of Philosophy but select courses from a wide variety of fields of study. Students interested in graduate studies in theology and religious studies should work out their programs of study with the Department of Philosophy.

**Pre-Medical.** Students interested in graduate studies in one of the health professions (dentistry, medicine, optometry, osteopathy, veterinary medicine) are encouraged to apply for admission to the Pre-Medical Program which is supervised by members of the Pre-Medical Committee. More about this program may be found under Pre-Medical Program listing in the section on Programs of Study and Course Offerings later in this catalog.

West Chester University also provides a **Pre-Engineering** Program in cooperation with Pennsylvania State University. At the end of five years a student earns a BS in physics from West Chester University and a BS in engineering from Pennsylvania State University. Students may choose from fourteen fields of engineering listed in the Physics section of this catalog.

### National Student Exchange Program

West Chester is one of approximately 70 American colleges and universities, ranging from the University of Hawaii at Manoa to the Universities of Maine and South Florida, which participate in the National Student Exchange Program. The project gives students an opportunity to widen their cultural and academic horizons through a semester or a year of study in another part of the United States without paying out-of-state tuition fees or incurring such complications as credit transfers. The exchange usually takes place during the sophomore or junior years so that returning students may share their experiences with students on the West Chester campus. In order to qualify for the program, applicants must be full-time students with a 2.5 grade point average. The annual recruitment program takes place during the fall semester with placement for the following school year occurring midway through the spring semester.

### Overseas Study

The Junior Year Abroad Program, sponsored by the University, makes it possible for interested students to spend one or more semesters in France. Those interested in the French language pursue two semesters at the University of Montpellier. Students with interests in other areas of French life and culture may develop,

with their departments, independent study programs or projects which can be facilitated by the West Chester faculty member in residence at Montpellier. See Department of Foreign Languages for details.

The Consortium of Pennsylvania State Colleges sponsors an annual summer studies program conducted in English in Salzburg, Austria. Periodically, several of the schools offer field-study courses which take place in Europe or other overseas locations.

## Internships

A number of departments offer the opportunity for internships, field experiences or practicums in which students may be employed in their field of interest to earn credit. Additional information is available under the various department listings and from the departments.

## Center for Academic Excellence

The Center for Academic Excellence aims to help all students attain excellence in their academic pursuits through a variety of services designed to provide assistance to a broad range of students.

The **Academic Advising Center,** located in Lawrence Center, provides the following services for an exploratory major (undeclared major) as well as for degree and part-time degree students who have not yet declared a major:

- Advice in regard to selection of courses
- Assistance in establishing educational objectives
- Information regarding various programs offered by the University
- Advising for the AA, BS, and BA in liberal studies degree programs
- Advising students in academic difficulty
- Guidance in and instructions for declaring a major
- Interpretation of University, school, and department regulations, rules and requirements.

The center also makes information regarding University services available to late afternoon and evening students. For more information call (215) 436-3505, or visit rooms 105 and 132, Lawrence Center.

The **University Tutoring Center** offers free tutoring in selected courses to any student. Sessions are scheduled on an hourly basis and most students find they receive the help they need in one or two weekly individual or small group sessions. The center is open daily and several evenings each week. Its basic focus is on assisting students to become independent learners. Call (215) 436-3505 for more information or visit the center in Room 105 Lawrence Center.

The **Honors Program** comprises a set of courses intended to challenge able and energetic students. It does not take the place of the many and varied courses of study at the University. Rather, it supplements them; students can take any major in the University and still be honors students. The Honors Program provides small classes which penetrate into their subjects and make much use of basic theory and original materials. The program also offers interdisciplinary seminars, in which students can bring together knowledge from various fields. Finally, the program offers the opportunity to do an independent senior project. The Honors Program functions outside the classroom, too. Honors students can choose to live in honors housing and associate with other able students in many fields of study. Honors students also have special lectures, concerts, and recreational events. For more information, contact the director of the Honors Program in Main Hall 131, telephone (215) 436-2996.

West Chester is responding to a range of special needs with its **Academic Development Program.** This includes an Act 101 component whose students qualify because they come from lower income families. Through state legislation, under Act 101, the University is assisted in its attempt to provide special services to students admitted in the Academic Development Program. The latter has demonstrated that special admittance students can succeed under the impetus of a specifically designed entry program and continued support services.

Facets of the program include academic preparation and general orientation to college during an initial registration period. Continued tutorial assistance and counseling support are also provided as needed during the first two years of an undergraduate program.

The program has grown and improved steadily. In addition to needed developmental courses in the basic skills of writing, reading, and mathematics, students may earn further general education credit. Additional information may be obtained from the office of the Academic Development Program located in Room 105 Lawrence Center; or call (215) 436-3505.

The **Office of Special Service to Disabled Students** provides physically disabled and learning impaired students and their families with diagnostic service information; special course scheduling; adaptive computer, cassette tape, and other educational equipment; assistance acquiring BVR financial support; student support groups; and a liaison to professors regarding students' special needs. For more information, contact the director of the Office of Special Services to Disabled Students, telephone (215) 436-2919.

The **Retention Office** sponsors programs and events aimed at increasing student satisfaction on campus. The office puts students in touch with the Big Brother/Big Sister Programs and with faculty friends or counselors for those who are thinking about leaving school. The Retention Office is located in Room 105, Lawrence Center. For more information, call (215) 436-3505.

The **Study Skills Project** is a one-credit, self-paced, computer-assisted learning strategies course which helps students gain proficiency in time management, mastering a reading assignment, taking notes, studying to remember, and other study skills. The Study Skills Project is located in Room 103, Lawrence Center. For more information, call (215) 436-2174.

The **Writing Consultancy** offers students guidance in the preparation of such written materials as term papers, lab reports, reviews, and essays. The consultancy offers confidential help with prewriting assignments (conceiving a topic, planning a paper), first drafts, and final editing, but will not do the actual writing. Consultancy services are not available for students in English composition.

## Women's Center

The increasing number of women students entering West Chester University

from high school or returning after some years in the home or job world necessitates a special center devoted to their particular problems. This is the major concern of the Women's Center. Located in Lawrence Center, the Women's Center provides a lounge area for conversation, study, peer advising, special interest programs (lectures, films, etc.). For more information call (215) 436-2122.

The Women's Center also runs the Children's Center for the children of West Chester University students and employees. The children participate in educational and developmental programs while their parents are in class or at work. The center is licensed by the Commonwealth of Pennsylvania and all required registration materials must be completed prior to enrollment in the center. The center offers reduced rates to students and multiple child discounts. For more information, contact the Children's Center at 436-2388 or the Women's Center at 436-2122.

## University College

West Chester University is concerned about the educational needs of everyone beyond compulsory school age who is interested in post-secondary educational opportunities on either a full- or part-time basis. This includes individuals who can be served by the regular university schedule and those who require different and convenient hours and ways to continue their education.

Persons interested in taking advantage of the various opportunities available through continuing education are enrolled in educational programs for a variety of reasons. They may be pursuing an associate, baccalaureate or master's degree, upgrading skills, or seeking personal and professional growth and enrichment.

Participants also represent a wide range of age, experience, and economic status. They include recent high school graduates who are unable to attend college full-time, older students who return to college or enroll for the first time, individuals looking for advancement or a change in career, and many who wish to broaden their personal horizons through study.

West Chester's University College serves an ever widening community with an increasing variety of credit and non-credit programs and special activities designed to meet individual and organizational needs. Current programs include:

(1) A wide variety of undergraduate courses which are offered during the evening for persons wishing to continue their education on a part-time basis. These courses are presently offered by the University departments and are creditable toward a regular degree when proper criteria and requirements are satisfied. Requirements for undergraduate evening courses are the same as those for the regular academic program.
(2) Non-credit educational experiences which are offered in the form of short courses, professional seminars, and courses customized for client groups. Admission is largely on the basis of interest, and work is ungraded but is recognized by special certificates.
(3) In-service courses which may carry graduate credit, in-service credit, or both. In-service courses in teaching require the University and one or more intermediate units to cooperate in sponsorship.
(4) Workshops, seminars, conferences and institutes offered by faculty and other organizations at West Chester University.

These activities may carry undergraduate or graduate credit, in-service credit, continuing education units or no credit at all. For information about any of the above programs, contact the University College, Elsie Bull Center, Room 144, (215) 436-3550.

## Graduate Studies

West Chester's graduate program, introduced in 1959, offers study leading to Master of Education, Master of Arts, Master of Science in Administration, Master of Business Administration, Master of Science, and Master of Music degrees. West Chester schedules its graduate courses in the late afternoon and evening during the fall and spring semesters. It is possible to pursue full-time graduate programs during the academic year and during summer sessions.

### Administration

M.S.A. (Concentrations: Economics/Finance, Health Services, Leadership for Women, Psychology/Personnel, Public Administration, Social Work, Sport and Athletic Administration, Urban/Regional Planning)
Cooperative degree with Clinical Chemistry

### Biology

M.A. in Biology

### Business

M.B.A. (Concentrations: Accounting, Economics/Finance, Management, Management Information Systems, Small Business Management)

### Chemistry

M.Ed. in Chemistry
M.S. in Chemistry; Clinical Chemistry
M.A. in Physical Science (Interdepartmental — See Physical Science)

### Childhood Studies and Reading

M.Ed. in Elementary Education (Concentrations: Bilingual Education, Children's Literature, Creative Teaching-Learning, Early Childhood Education, Elementary Education, Human Development, Language Arts, Mathematics, Reading, Science, Social Studies, Special Education)
Certification in Elementary Education
M.Ed. in Reading
Reading Specialist Certification
Certificate of Advanced Graduate Study in Childhood Studies and Reading

### Communicative Disorders

M.A. in Speech Pathology

### Counselor, Secondary, and Professional Education

M.Ed. in Elementary Education Counseling; Secondary Education Counseling
M.S. in Higher Education Counseling; Educational Research
Specialist I Certificate in Counseling (Elementary or Secondary)
M.Ed. in Secondary Education (Academic concentrations: Biology, English, French, German, History, Latin, Mathematics, Spanish)
M.Ed. in Secondary Education
Courses in Environmental Education; Urban Education

### Criminal Justice

M.S. in Criminal Justice

### Economics

M.S.A. (Concentration: Economics/Finance)

### English

M.A. in English
M.Ed. in English

### Foreign Languages

M.Ed. in French, German, Latin, Spanish
M.A. in French, Spanish

### Geography

See Government and Planning

### Geology and Astronomy

M.A. in Physical Science (Interdepartmental — See Physical Science)

### Government and Planning

M.A. in Political Science; Geography
M.S.A. (Concentrations: Leadership for Women, Public Administration, Urban/Regional Planning)

### Health
M.Ed. in Gerontology: Public Health; School Health
M.S. in Environmental Health; Gerontology; Public Health; School Health; Administration (Concentration: Health Services)
Certificate program in Gerontology

### History
M.A. in History
M.Ed. in History

### Instructional Media
M.Ed. in Instructional Media Education
M.S. in Instructional Media
Teaching Certification for Instructional Media Education

### Leadership for Women
M.S.A. (Concentration: Leadership for Women)

### Mathematical Sciences
M.A. in Mathematics (Concentrations: Pure Mathematics, Mathematics Education, Applied Computer Science)
M.Ed. in Mathematics
M.S. in Computer Science

### Music
M.A. in Music History
M.M. in Accompanying; Keyboard Performance; Piano Pedagogy
M.M. in Music Education
M.M. in Instrumental Performance
M.M. in Music Theory-Composition
M.M. in Vocal/Choral Performance

### Philosophy
M.A. in Philosophy

### Physical Education
M.Ed. in Health and Physical Education
M.S. in Physical Education; Administration (Concentration: Sport and Athletic Administration)

### Physical Science (Interdepartmental)
M.A. in Physical Science (Concentrations: Chemistry, Geology/Astronomy, Physics)

### Physics
M.A. in Physical Science (Interdepartmental — See Physical Science)

### Political Science
See Government and Planning

### Psychology
M.A. in Clinical Psychology; General Psychology; Industrial/Organizational Psychology; Social Science (Concentration: Psychology)
M.S.A. (Concentration: Psychology-Personnel)

### Public Administration
See Government and Planning

### Social Work
M.S.A. (Concentration: Social Work)

### Special Education
M.Ed. in Special Education

### Teaching English as a Second Language
M.A. in Teaching English as a Second Language

**The following departments and interdisciplinary areas offer graduate courses, but no graduate degree.**

Art, Ethnic Studies, Linguistics, Philosophy, Speech Communication and Theatre, Women's Studies

## Summer Sessions

West Chester University's summer program, the oldest summer program in the United States, has one of the largest enrollments in the State System of Higher Education. Over 600 courses, both graduate and undergraduate, are offered including workshops, seminars, and internships as well as the usual classes. Offerings are available in every department and in interdisciplinary areas.

Students from any college or university as well as non-traditional students may take courses for enjoyment, personal growth, or degree credit. The summer program runs for 12 weeks (two 3 week sessions and one 6 week session) and, a student can earn up to 12 credits during the summer sessions.

Summer Session catalogs, containing the course schedules and application cards, may be obtained from the director of summer sessions (undergraduate) and the dean of graduate studies (graduate). For more information contact the Summer Sessions Office at (215) 436-2230.

## Veterans Affairs

Under the provisions of Title 38, West Chester University is an accredited university for the education of veterans. The University cooperates with the Veterans Administration to see that honorably separated or discharged veterans receive every consideration consistent with either degree or non-degree admission standards.

All veterans, certain dependents of disabled or deceased veterans, and war orphans who wish to obtain educational benefits under the appropriate public laws must register with the office of Veterans Affairs at initial registration. Veterans must renew their registration with this office at the beginning of each subsequent semester and each summer session. The Veterans Administration requires students who are veterans to schedule at least 12 s.h. per semester in order to receive full benefits under the G.I. bill.

A representative of the Veterans Administration is in the Financial Aid Office in the Elsie Bull Center, Room 138, counseling and acting as liaison between students and the Veterans Affairs Office in financial and other matters.

## International Education

Because the well-educated person should be aware not only of his or her own cultural heritage but also have exposure to other cultures as well, West Chester University offers broad, comprehensive, and meaningful programs in international education. Through a wide range of interrelated programs and activities, students have the opportunity to enlarge their own horizons and develop increased understanding of and appreciation for other cultures.

International education at West Chester University encompasses both curricular and extracurricular programs including student and faculty exchanges with other countries, language studies including selected critical languages in addition to those regularly offered by the University, area and cross-cultural studies, research in appropriate curricula, and special seminars and programs on international and global issues.

For additional information on international education contact the Center for International Programs

## Armed Services ROC and ROTC Programs

The University, with the approval of the Council of Trustees, permits West Chester students enrolled in the Armed Services Reserve Officer Candidate Program (ROC) to receive six semester hours of baccalaureate credit upon successful completion and certification of ROC military requirements. Such credits are classified as free elective transfer credits. Depending on the status of the student's program at the time of ROC credit transfer, these credits will be counted toward, or in excess of, the 128 credits required for a baccalaureate degree.

ROC programs are contingent upon successful completion of military requirements during vacation and the award of a college degree before being granted the service commission. The programs cover the Navy's Basic and Advanced Reserve Officer Candidate courses and the Marine Corps' Junior and Senior Platoon Leadership courses.

West Chester students may also enroll in the Army Reserve Officers' Training Corps or the Air Force Reserve Officers'

Training Program (ROTC) and count 6 hours of credit in military science or aerospace studies as free electives in their baccalaureate programs. Both ROTC programs are open to men and women. The Army ROTC program is available on the West Chester campus through a cross-enrollment agreement with the Department of Military Science at Widener University. West Chester students may participate in the Air Force Reserve Officer's Training Corps through a cross-enrollment agreement with Saint Joseph's University. All Aerospace Studies courses are held on the Saint Joseph's University campus. More about both the Army and the Air Force ROTC programs may be found in the section on Programs of Study and Course Offerings later in this catalog.

West Chester University students may enroll in the United States Marine Corps Platoon Leaders Class as freshmen, sophomores, and juniors. All training is done during summer vacation and reserve officer commission credits will be counted upon successful completion of military requirements and the successful completion of a University degree. The Platoon Leaders Class program is open to males and females and is offered at the West Chester University campus.

### The Writing Program

West Chester University's cross-disciplinary Writing Program was begun in 1978 as a pilot project funded by the National Endowment for the Humanities and the Pennsylvania State College Educational Trust Fund. Building on the skills developed in English composition courses, the program is based on the assumption that writing is integral to all academic learning in liberal and professional studies. The program's focus is therefore not on remediation but on enhancement; the University regards writing as much more than a set of basic language skills. The program provides for:

(1) *Writing-Emphasis Courses each semester* in traditional liberal studies (for example, English literature, history, anthropology, sociology, chemistry, and physics) and in professional studies (for example, criminal justice, early childhood education, nursing, and public health).
(2) *A general requirement that all students must take three of these writing-emphasis courses,* in addition to English composition, before their senior year.
(3) *In-house lectures, seminars, and workshops on writing* for faculty members in all disciplines.

The WCU Writing Program has been recognized for its scope and achievement by the Association of American Colleges. It has also sponsored the Pennsylvania Writing Project, an outreach program for teachers in local schools. The Writing Program is administered by a director and a committee of seven faculty members representing different fields of study.

# Campus and Facilities

### Description of the Campus

The University has a land area of 388 acres. North campus, an expansion of the original campus, occupies 97 acres at the southern boundaries of the Borough of West Chester. South campus, which came into full use in 1970, is a 291-acre expanse of the gently rolling countryside which Andrew Wyeth has defined in his landscapes of Chester County.

Fronting on South New Street ¾ of a mile south of the original campus, south campus contains the massive Health and Physical Education Center, which has won national acclaim for the quality and extent of its teaching, performance, and research facilities. John A. Farrell Stadium, playing and practice fields, and tennis courts surround the center. Included in the open areas is a stretch of natural forest, part of which has been conserved as a resource for the natural sciences.

Architecturally, north campus combines late 19th century, collegiate Gothic, and contemporary styles. Three of the University's green-hued serpentine stone buildings, which have given West Chester a unique character for many decades, are still in use. The University is also known for its magnificent old trees.

A massive building program from 1966 to 1976 produced a number of major facilities and utilities which equip the University well for the needs of modern education. The Elsie O. Bull Center, the Francis Harvey Green Library, Mitchell Hall (Fine Arts), Main Hall (Humanities), Earl F. Sykes Union Building, and the Schmucker Science Center are major additions, along with six high-rise residence halls which span the western side of north campus.

### Scheduling of University Events

With the exception of activities to be scheduled into Sykes Student Union Building and residence halls, the Office of Space Management and Calendar (SMAC) is the contact point for information regarding the availability of University facilities for academic and non-academic functions and events. Requests to schedule the use of most facilities require a three week lead time if support services are required, two weeks if no support services are required.

### Computing Services

Computing Services provides computing facilities for a wide variety of users — both academic and administrative. Many of the University's administrative functions, such as registration, grade reporting, and billing depend heavily on the campus-wide transaction processing system which provides centralized access to University data from the 500 microcomputers located throughout the campus.

More importantly, computing is a vital instructional and research tool. Computing Services offers students and faculty a wide range of computing resources from mainframe to microcomputers, printers, plotters, graphics workstations, digitizers, and optical scanners. Many of these facilities are available at various locations about campus, but the Academic Computing Center on the ground floor of Anderson Hall serves as a focal point of instructional computing activity. A valid ID card is required to use the Academic Computing Center.

All computing facilities throughout the campus are joined by a data communications network. This network provides

high speed access to computers from workstations on campus. Off-campus users can also access all computers through modem facilities connected to the network. The communications network provides electronic mail capabilities for all campus workstations.

Major hardware facilities include a large IBM 4381 mainframe, a new AT&T 3B2 minicomputer, and IBM, Apple, and Commodore microcomputers. The University has been very fortunate in having industry recognize the importance of computing to our programs — AT&T 3B2 and Commodore computers were major donations from their respective companies.

Available software includes statistics packages such as SAS, SPSS and MINITAB; word processing; database management systems; graphics packages; and all major computer languages. Computing Services provides many seminars for students, faculty and staff to familiarize the University community with the various software packages. Computing Services staff provides technical assistance with these packages. In addition, the CSC 101 Introductory Computing course offered by the Department of Mathematical Sciences to all students provides them with a working knowledge of several of the commonly used software packages.

In 1987 the library catalog will be online to all workstations. This will enable students and faculty to search the library's holdings quickly for materials needed for their studies or research. One of Pennsylvania's six regional computer resource centers is located in the library, providing instruction to teachers in the Southeastern Pennsylvania area. This resource is also available to students and faculty.

## Darlington Herbarium

The Darlington Herbarium, housed in Schmucker Science Center, is one of the most highly regarded historical collections of dried plant specimens in the East. Among the 20,000 specimens are plants collected by such famous explorers and botanists as Captain John Fremont, Thomas Nuttall, Sir William Hooker, C.S. Rafinesque, and George Englemann. More than 200 collectors from America's formative years of 1820 to 1850 are represented. The herbarium was the work of Dr. William Darlington (1782-1863), a member of the West Chester Cabinet of Science. Dr. Darlington was eminent in West Chester as a physician, educator, banker, businessman, historian, and botanist. His plants, however, were his first love. A state park has been established in northern California to preserve a rare species of insectivorous plant named in his honor — *Darlingtonia*.

## Robert B. Gordon Natural Area for Environmental Studies

The University has conserved 100 acres of natural woodland, field and streamside habitat located on south campus and utilizes it for several kinds of outdoor studies in the natural sciences. Dedicated in 1973, the area was named for Robert B. Gordon, faculty member and chairperson of the University's Department of Science from 1938 to 1963.

## Francis Harvey Green Library

The Francis Harvey Green Library provides an excellent environment for study and research. The six-story facility has the capacity to house one-half million books. It is furnished with a variety of seating areas including individual study carrels; faculty and graduate lounges; computer lab facilities; group studies; seminar rooms; and general reading areas.

The library has an increasingly important role in both teaching and research with its growing collection of nearly 440,000 volumes and subscriptions to 2,600 journals. Augmenting this general collection with more than 350,000 titles is the micromedia collection including books, periodicals, newspapers and doctoral dissertations along with the facilities to read this material. The total resources of over three quarters of a million volumes compare favorably with other major public and private research libraries in our geographic area.

Other noteworthy collections can be found in the library complex. An extensive holding of courses of study and textbooks and a variety of audiovisual materials and equipment are held in the instructional materials center. Also available are separate collections for children's literature, government documents, and maps. The library is a selective depository for government documents and maps.

The Special Collections Room holds the Chester County Collection of scientific and historical books; the Normal Collection, publications by West Chester University faculty and alumni; the Ehinger Collection (a collection of historical books on physical education); the *Biographies of the Signers of the Declaration of Independence* by John Sanderson; and the Shakespeare Folios. The Philips Autographed Book Library is housed in a specially designed room in the Philips Memorial Building.

West Chester students may take advantage of the library's many services such as reference, computerized on-line literature searching, interlibrary loan, and photoduplication. To add to the cultural enrichment of the college community the library schedules informative displays and art exhibits throughout the year.

## Music Library

The Music Library is part of the University library. Located in Swope Hall, it houses an extensive collection of music, one of the largest of its kind in the Commonwealth of Pennsylvania. Its rapidly growing holdings include over 24,000 scores (historical editions, collected works, opera, keyboard, vocal and instrumental music) and more than 21,000 recordings (classical, folk, nonwestern, popular). Listening facilities for forty persons are available within the library.

## Art Collections

The University's permanent art collection is made up primarily of gifts from interested art patrons, senior class purchases, and gifts from the alumni. The Student Services Inc. permanent art collection is on display at the Francis Harvey Green Library, Philips Memorial, and the new SSI Art Gallery in the Sykes Student Union. The SSI collection consists of a number of important works such as the water color, "Andress Place," by Andrew Wyeth.

## Historical Properties

Among a number of historical properties which came to the University through the Chester County Cabinet of Natural Sciences, a scientific society of the early 19th century, are the Anthony Wayne Letters, which include letters to Wayne from George Washington, Benedict Arnold, and others. The University also owns a grandfather's clock which belonged to Benjamin Franklin and Anthony Wayne's telescope, both of which came from the Chester County

Cabinet. The Chester County Cabinet and the West Chester Academy merged to form the nucleus of the present University.

### Center for Governmental and Community Affairs

Established in 1979, with offices in Ruby Jones Hall, the center is a campus service to local governmental and community organizations for research, faculty services, workshop sponsorship, intern placements, and resource materials. Center activities focus on facilitating community/campus interchange in furthering the use of University resources in solutions to governmental and community problems.

# Admission to West Chester

West Chester University evaluates its applicants on the basis of scholarship, character, and potential for achievement in the programs to which they apply. The University operates on a rolling admissions policy whereby applications are reviewed as received and applicants are notified as quickly as possible of their status. Qualified students of any age from all racial, religious, ethnic, and socio-economic backgrounds are welcome at West Chester. Studies may be pursued on a full or part-time basis.

### General Requirements for Admission of Freshmen

1. Graduation, with satisfactory scholarship, from an approved secondary school or approval by the Credentials Evaluation Division of the Pennsylvania Department of Education.
2. Either a satisfactory score on the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board (CEEB) or satisfactory scores on the tests given in the American College Testing Program (ACT). Applicants who graduated from high school *more* than five years ago do not need to submit test scores.

### How and When to Apply for Admission

For application materials please write or call the Office of Admissions, 110 West Rosedale Avenue, West Chester University, West Chester, Pennsylvania 19383 (215/436-3411).

Freshmen applicants for a fall semester are urged to begin the application process at the beginning of their senior year in high school.

Applicants for a spring semester should submit an application by December 1.

Freshman applicants for the nursing program are admitted only for the fall semester. Transfer students may be considered for the spring and fall semesters.

Candidates will receive notification from the director of admissions as soon as possible after decisions are reached.

### Policy on Early Admission

In exceptional circumstances, students with superior academic qualifications and unusually mature personal development are admitted as freshmen upon completing their junior year of secondary school. Students who, in the opinion of their guidance counselor, warrant consideration for early admission may obtain more information from the director of admissions. The closing date for applications is June 1.

### Arranging for Tests

Information about CEEB or ACT may be obtained from high school guidance counselors.

### Transfer Students

Students who have been enrolled in any postsecondary institution after graduation from high school and/or have attended West Chester University as nondegree students must apply as transfer students. Students whose cumulative grade point average is less than 2.00 will not be considered for admission as degree candidates.

All application procedures must be completed by August 1 for a fall semester or December 1 for a spring semester. If enrollment limits are met before these dates, admissions will be closed.

### Application Procedures for Students Transferring from an Accredited Institution

1. File an application, available from the Office of Admissions.
2. See that the director of admissions receives:
   a. Two official transcripts from all institutions attended. If preliminary (incomplete) transcripts are submitted, the student must see that final transcripts are filed later.
   b. Mid-term grades, if the student is enrolled elsewhere in the fall semester and is applying to West Chester for the following spring semester.
3. If a student has completed less than 30 semester hours of credit he or she must supply SAT or ACT scores and a high school transcript.

If accepted, admission is contingent upon successful completion of current coursework with at least a C average as documented by transcripts of all work attempted or completed.

Transfer students should note the paragraph titled "Maintenance of Minimum Standards" in Academic Policies and Procedures.

Transcripts will be evaluated in accordance with the policies of the department to which the student seeks admission. After the student has been admitted, he or she should work out an acceptable program of study in close consultation with an advisor in the major department.

### University Policies for Students Transferring from a Non-Accredited Institution

Applicants from collegiate institutions (including community colleges and junior colleges) which are *not accredited* by one of the six regional associations in the United States will be considered for admission if the applicant's cumulative index is 2.00 (C) or better.

The evaluation of courses listed on transcripts from an institution not accredited by one of the six regional associations will be made by the student's major department in consultation with the faculty dean and transfer credit analyst. All evaluations are subject to review by the provost and academic vice-president.

### Foreign Students

Students from foreign countries may be admitted to degree programs if, in addition to satisfying the general requirements for admission, they also demonstrate proficiency in English. They are required to submit satisfactory scores from one of the following: Test of English as a Foreign Language (TOEFL), Scholastic Aptitude Test (SAT), or American College Test (ACT), or other acceptable evidence of this proficiency. Foreign students are admitted only for the fall term each year and applications must be submitted to the Office of Admissions by June 1. However, students are encouraged to complete the application process well in advance of this date to allow sufficient time for securing a student visa if they are admitted to the University.

### Physical Examination Requirements

Applicants are not asked to submit a report of medical history until they have been accepted for admission. Upon acceptance, they will receive a form for the necessary health examination. No student will be permitted to register or attend classes until his or her physical examination form has been filed with the University Health Center. Students who are handicapped or medically disabled may be requested to seek additional advising or counseling for career and course selections.

### Physically Disabled Students

West Chester University will make every effort to assure disabled students accessibility to all classes required for their program of study and will endeavor to remove all obstacles to a fulfilling, comprehensive university experience. The Office of Admissions should be advised of any disabilities to assure suitable accommodations. For additional information, please contact the Office of Special Services.

### Second Baccalaureate Degree

An individual may pursue a second baccalaureate degree at West Chester University after earning the first baccalaureate degree either at West Chester or another institution. Such an individual must apply for admission through the Office of Admissions as a transfer student.

### Admission of College Graduates Seeking Certification

College graduates who wish to obtain teaching certification should consult with the Certification Office in the School of Education.

### Readmission of Former Students

Students who have withdrawn from West Chester for two or more consecutive semesters must request an application for readmission from the Office of Admissions. After an absence of only one semester, students wishing to return should contact the Office of the Registrar and their department advisor. Those who have attended any institutions of higher learning since leaving West Chester must request those institutions to forward transcripts of their records to the Transfer Credit Analyst, West Chester University, West Chester, Pennsylvania 19383.

Students intending to enroll in student teaching in the first semester of readmission must file an application for student teaching with the individual departments at least four months before their expected readmission. See also "Student Teaching" in the chapter on academic affairs.

All readmission applications are to be filed by August 1 for the fall semester or December 1 for the spring semester.

### Admissions Office Staff

Marsha Haug — Director of Admissions
Fran Cubberley — Associate Director
Wayne Locust — Assistant Director
Eileen Weiss — Assistant Director
Joseph Bradley — Assistant Director
Gene Lyda — Coordinator of Minority Recruitment
Sharon Chandler-Manly — Admissions Counselor
Kathy Hein — Admissions Counselor

# Fees and Expenses

### All Fees and Expenses are subject to change without notice.

*Unless otherwise specified, fees are paid by check or money order payable to West Chester University. Your canceled check or money order record serves as your receipt.*

### Basic Undergraduate Fees for Legal Residents of Pennsylvania

| | |
|---|---|
| Full-time students (between 12-18 semester hours) | $840.00 per semester |
| Extra charge for semester hours over 18 | $70.00 per semester hour |
| Part-time students (11 semester hours or less) | $70.00 per semester hour |

## Basic Undergraduate Fees for Out-of-State Students

| | |
|---|---|
| Full-time students (between 12-18 semester hours) | $1538.00 per semester |
| Extra charge for semester hours over 18 | $128.00 per semester hour |
| Part-time students (11 semester hours or less) | $128.00 per semester hour |

## Housing Fee

The housing fee for students living in campus residence halls is $1084.00 per semester and covers room ($680.00) and meals ($404.00) while the University is in session. These fees are subject to an annual adjustment.

## Community Center Fee

The Community Center Fee is fully refundable to those students who *officially* withdraw prior to the start of classes. This fee is non-refundable for students withdrawing after the start of classes.

| | |
|---|---|
| 1 through 6 credits | $ 2.50 per semester |
| 7 through 9 credits | $ 5.00 per semester |
| 10 credits or more | $10.00 per semester |

## Credit by Examination

A fee of $25.00 is paid at the Student Accounts Office, Financial Management Division, at the time the examination is scheduled.

## Room Reservation Fee

A room reservaton fee of $100.00 is required of all currently enrolled students and all new students who apply to the Office of Housing and Residence Life for a room reservation for the next academic semester. Applications for returning students are taken during a three-day period announced each spring in campus publications. The room reservation fee is not refundable, but is credited to the housing fee. Payment must be made at the time of application by personal check or money order, payable to West Chester University.

## Financial Obligations and Payment of Fees

Students and their parents or guardians should observe that all fees and expenses are subject to change without notice and that, since the acceptance of a student is for a semester, financial obligations are for a semester.

All fees are due and payable on or before the last official registration day for all previously enrolled or scheduled students. Thereafter a $25 late registration fee will be charged to the student's account. For new students who enroll after the last official registration day, all fees are due and payable at the time of registration; otherwise, a late fee of $25 will be charged to their accounts.

On and after the first class day any student whose account indicates a debit balance will be declared delinquent and subject to having his/her schedule purged and to being restricted from attending classes. If, under these circumstances, a schedule is purged and there is any credit balance in the student's account, refunds will be granted in accordance with the University refund policy.

The only exceptions to these policies are for those students who have been declared eligible for full aid by the Financial Aid Office. Students eligible for only partial financial aid are expected to pay their portion of the fees in accordance with the policies set forth above.

Students who fail to meet their financial obligations to the University as set forth here will have their schedules purged, will be restricted from attending classes or enrolling for future sessions, and will be ineligible for any services from the University until all past obligations have been fulfilled including any late or dishonored check fees.

## Deferred Payment Policy

The University may grant deferred payment to a student or his/her parent or guardian who provides evidence of a good financial credit rating. If approved for deferred payment, the student or parent is required to adhere to the established payment schedule.

Failure to make payments according to the established schedule will subject the student to the same penalties that apply to any student who fails to met his/her financial obligations to the University.

## Advance Payment of Housing and Basic Fees

All students are required to pay their housing and basic fees in advance of each semester. The University sends bills for these fees preceding each semester. Students who do not make payment within the stipulated period are dropped from the admissions list or the rolls of the University, lose all privileges and priorities including their room reservations, forfeit their room reservation fees and incur a late fee.

Payments normally fall due each academic year as follows:

| | |
|---|---|
| Fall semester | Early in August |
| Spring semester | Late in December |

Any change in these dates will be shown on fall or spring semester invoices. Checks should be made payable to West Chester University and mailed to:

Student Accounts Office
Financial Management Division
Elsie Bull Center
West Chester University
West Chester, Pa. 19383

## Application Fee for New Students

An application fee of $15 is required of all applicants. It is not credited to the student's account and is not refundable under any circumstances. Receipt of a dishonored check will immediately cancel consideration of the application.

## Acceptance Fee

The student accepts an offer of admission by paying $100 as a good faith demonstration of his/her intention to enroll in the University in the semester indicated. This fee is applicable on initial admission and on any subsequent readmission to the University. It is not refundable. Upon enrollment, the acceptance fee will be credited toward the basic fee.

## Damage Fee

Students are held responsible for damage, breakage, loss, or delayed return of University property and will be charged

for any damage other than that occurring from normal use or deterioration. If a student damages University property while using an appliance not provided by the University, he or she is held liable for the repair of the University property.

All residence hall students must pay a $50.00 residence hall damage deposit which will be refunded at the end of the second semester provided the University has determined satisfactory occupancy.

## Private Music Instruction Fees

Private music instruction is charged at the rate of $45 per semester, plus the appropriate credit charge and fees, for half-hour lessons, and $90 per semester, plus the appropriate credit charge and fees, for hour-long (advanced) lessons. Music majors pay one lesson fee for *all* required lessons taken during the semester (required lessons are those listed in the School of Music Handbook as mandatory in a student's curriculum), and one lesson fee for *each* elective (not listed in the handbook as mandatory) or repeated lesson taken during that semester. Non-music majors pay one lesson fee for *each* lesson taken during the semester. Fees for elective and repeated lessons are billed to students approximately the middle of the semester.

The private music instruction fee is only refundable up to and including the last day of the add period of the semester in which the lesson is taken; after that date, the fee will not be refunded.

Students pay no extra fee for the use of practice pianos. They are, however, billed at mid-semester for:

1. Pipe organ for practice, one period each weekday, $36 per semester
2. Band or orchestra instruments, $6 per instrument per semester

## Health Center Fee

A Health Center fee of $17.50 is required of all full-time undergraduate students. The Health Center Fee is fully refundable to those students who *officially* withdraw prior to the start of classes. This fee is non-refundable for students withdrawing after the start of classes.

## Certification Fee

Students applying for a Pennsylvania teaching certificate at the completion of their program are charged a $15.00 fee payable to the Commonwealth of Pennsylvania.

## Miscellaneous Fees

**Record of transcript fee** of $2 is charged for each transcript requested.

A **late registration fee** of $25 is charged to all students enrolled in the previous semester who schedule, register, or pay their fees after the official published registration deadline. All other students who enroll after the deadline and do not pay their fees at the time of registration will also be assessed this fee.

**Additional housing fee** of $19.00 per week is required when one person is permitted to occupy a double room. (This privilege is given only in summer sessions.)

**Auditing fee.** Students auditing a course are charged the part-time basic fee of $70.00 per semester hour if they are residents of Pennsylvania, or $128.00 per semester hour if out-of-state students.

A **dishonored check fee** of $25 applied to stopped payment checks or checks drawn on insufficient funds. Failure to make restitution for the dishonored check and pay the $25 fee before the official registration deadline will require that an additional $25 late registration fee be charged to the student's account.

A **Student Services Inc. Fee (IGA)** of $38.00 per semester is collected from all full-time undergraduate students, and $11.00 per semester from all undergraduate part-time students. This fee is administered through a cooperative organization under regulations approved by the Council of Trustees. It covers the cost of the extra- and co-curricular programs in such areas as athletics, various musical organizations, lectures, entertainment, and student publications. A portion of the fee ($1.00) represents government dues and will go to the Residence Hall Association (RHA) or Off Campus Student Association (OCSA) depending upon residency status.

Refunds of this fee will be made in accordance with the schedule listed under Basic Fee Refund Policy.

There is no policy for deferred payments of this fee.

A **meal card replacement fee** for replacement of a lost card is $5.00. Information on procedures for obtaining a replacement card can be obtained by contacting the Food Service office — 436-2730.

A **graduation fee** is required of all degree candidates. No degree will be granted until this fee is paid. The bill is presented when the student files Notice of Intention to Graduate. The fee is payable at the Student Accounts Office in the Elsie Bull Center. Checks or money orders should be made payable to "West Chester University".

The University collects a **parking fee** in an amount to be specified each year from those who are eligible and who desire to utilize on-campus parking facilities. For details, consult the motor vehicle regulations which accompany the student bills.

## Withdrawal Procedure

Students who wish to withdraw from the University after paying their semester fees must follow the official withdrawal procedure. This procedure begins in the Office of the Registrar, Elsie Bull Center. See also "Withdrawal from the University" in the chapter on academic policies and procedures.

## Policies on Repayments and Refunds

Refunds cannot be made after the close of the semester. Initiate refund requests immediately by contacting the Office of the Registrar and the Student Accounts Office in the Elsie Bull Center.

Repayment of the application fee or acceptance fee will not be made under any circumstances.

Repayments will not be made to students who are temporarily or indefinitely suspended.

PLEASE REFER TO THE SUMMER UNDERGRADUATE CATALOG FOR SUMMER SESSION FEES AND POLICIES.

## Basic Fee Refund Policy

Refunds cannot be made unless the student *officially* processes his/her withdrawal from the University or his/her drop from a course through the Office of the Registrar. Acceptance fees credited to the student's basic fee are not refundable. Other amounts paid and credited toward the basic tuition fee shall be refundable in full for students who withdraw for approved reasons (such as documented ill health or personal tragedy) prior to the first day of the semester.

Withdrawal prior to the first of the semester, for unapproved reasons, shall be treated as having withdrawn during the first or second week.

Beginning with the first class day of the semester the basic tuition fee exclusive of

the acceptance fee shall be refundable for students who withdraw in accordance with the following schedule:

| | |
|---|---|
| 1st or 2nd week | 80% |
| 3rd week | 70% |
| 4th week | 60% |
| 5th week | 50% |
| 6th week and thereafter | NO REFUND |

Students who officially reduce their credit hour load so as to qualify for a lower basic tuition fee shall receive a refund of a percentage of the difference in accordance with the above schedule.

## Appeals to Fee and Refund Policies

Appeals to the policies governing fees and refunds shall be adjudicated by the Student Accounts Office. If further appeal is desired, it will be made to the vice-president for administrative and fiscal affairs, whose decision will be final.

## Housing Refunds

The $100.00 room deposit is not refundable. When students change from resident status to commuter status after the beginning of the semester there is no room refund, except under the most compelling reasons and when the "Request for Cancellation of Occupancy Agreement" is properly filed in the Office of Housing and Residence Life.

## Meal Refunds

The fee for meals may be refunded on a weekly prorated basis. Contact Student Accounts Office in the Elsie Bull Center.

## Billing Address Changes

If a student's billing address changes during enrollment at the University, the new address must be given to the Student Accounts Office in the Elsie Bull Center. This will avoid delayed delivery of registration materials and grades.

A change in domicile from out-of-state to Pennsylvania requires a notarized affidavit and supporting evidence. For information on this procedure, contact the Student Accounts office at (215) 436-2552.

## Determination of Legal Residence

A student who does not have a Pennsylvania domicile is classified as out-of-state and pays fees as a non-resident student. The amounts for the activity fees, room and meal charges and costs of books and supplies, however, are the same as for students who are classified as Pennsylvania residents. Domicile is defined as the place where one intends to and does in fact permanently reside.

Determination of Pennsylvania domicile is made on the basis of documentary evidence, statements from disinterested persons, and the presumptions set forth below.

1. Continuous residence in Pennsylvania for a period of 12 months prior to registration creates a presumption of domicile.

2. A person attempting to establish domicile must have citizenship or proof of intention to become a citizen or must have been admitted to the United States on an immigrant visa.

3. A minor (i.e., person under 22) is presumed to have the domicile of his or her parent(s) or guardian.

4. A member of the Armed Forces of the United States stationed in Pennsylvania shall be considered a resident of Pennsylvania for the determination of fees.

5. A student receiving a scholarship or grant dependent upon domicile from a state other than Pennsylvania is not domiciled in Pennsylvania.

Examples of factors which may provide convincing documentary evidence include purchase or lease of a permanent independent residence, payment of appropriate state and local taxes, transfer of bank accounts, stock, automobile, and other registered property to Pennsylvania, driver's license, agreement for permanent full-time employment, membership in organizations such as social, civic, political, athletic, or religious, voter's registration, statement of intention to reside indefinitely in Pennsylvania, statement from parent(s) or guardian setting forth facts to establish a minor's financial independence, and separate residence as documented by affidavit and/or copy of income tax return.

A student may challenge residence classification by filing a written petition with the Chancellor, State System of Higher Education, in Harrisburg where the decision on the challenge shall be final.

## Residency Status for Military Personnel

Governor Thornburgh has signed Act 287 (Senate Bill 1015) which allows active duty military personnel to receive lower resident tuition rates while assigned to active duty in Pennsylvania.

These personnel and their dependents must maintain a legal residence in Pennsylvania to qualify for these lower rates.

## Delinquent Accounts

No student will be enrolled, graduated, or given a transcript of his record until all charges due at the particular time are paid.

## Identification Cards

All students — both part-time and full-time — must secure an identification (ID) card from Student Services Inc. at a cost of $2.00, either during orientation or at the beginning of a semester. The charge for replacement of a lost card is $5.00.

## Library Cards

The student ID card serves as a library card.

## Gymnasium Uniforms

*Men students in the B.S. in Health and Physical Education degree program* are required to buy athletic and gym outfits in their first semester and again in the third semester.

*Women students in the B.S. in Health and Physical Education degree program* must buy uniforms for their first semester. Order forms are sent to each applicant upon her acceptance by the University. A slight additional expenditure is required of all sophomores.

*All other students* are required to purchase a regulation gym outfit. For men the outfit includes a pair of white shorts, a white T-shirt, white socks, and canvas gym shoes.

## Special Costs for Nurses

At the end of their sophomore year, students in the B.S. in Nursing program must purchase uniforms. Throughout enrollment, students in this program must carry liability insurance.

# Financial Aid

The purpose of financial aid at West Chester University is to provide financial assistance and counseling to students who can benefit from further education, but who cannot obtain it without such assistance. Financial assistance consists of gift aid in the form of scholarships or grants, and self-help aid in the form of employment or loans. The main responsibility for meeting educational expenses rests with the student and his or her family. Financial aid is a supplement to family contribution and is to be used for educational expenses.

Eligibility for financial aid, with the exception of some private scholarships and the Parent Loan Program, is based on demonstrated financial need. Family income, assets, and family size influence the demonstrated financial need of the student.

All documents, correspondence, and conversations among the aid applicant, his or her family, and the Financial Aid Office are confidential and entitled to the protection ordinarily arising from a counseling relationship.

*In order to receive financial aid, the student must:*

1. Be accepted for admission as a degree student enrolling at West Chester University, on at least a half-time basis (i.e., 6 or more credit hours per semester) or, in the case of a student already attending the University, be enrolled and making satisfactory academic progress as at least a half-time degree student. See the section entitled "Satisfactory Academic Progress Policy For Financial Aid" for a more detailed explanation of this requirement.
2. Submit a Pennsylvania State Grant & Federal Student Aid application to Harrisburg, PA before May 1. *All students, regardless of state residency status, must complete this form in order to be considered for financial aid at West Chester University.* This application is the document which will be used to determine demonstrated financial need for the student. All students are encouraged to complete this application.
3. Submit the WCU Financial Aid Application to the Financial Aid Office by May 1.
4. Submit, in the case of a transfer student, a Financial Aid Transcript from all previously attended postsecondary educational institutions. This transcript may be obtained through the Financial Aid Office. Submit this transcript even if no aid was received at those institutions.
5. Apply for the state grant program in his or her state of legal residence.
6. Submit any other requested documentation concerning financial and family circumstances that may be requested by the Financial Aid Office, or any agency that administers financial assistance programs. Financial aid applicants may be required to submit copies of their/their parents IRS forms or various other income documents.

The submission of the above does *not* automatically entitle a student to receive financial aid. The Financial Aid Office follows the regulations established by the federal government in awarding aid. Aid applicants are ranked according to unmet need (based on budget, federal and state grants, and expected family contribution) and available funds are offered to the neediest students first. *It is necessary for students to apply for financial aid each academic year.*

Unless otherwise specified, requests for scholarships, grants, loans, and employment opportunities described in this catalog should be made to the Financial Aid Office. Application forms for state and federal grants may be obtained from the Financial Aid Office at West Chester University and from the offices of most high school guidance counselors. Questions concerning financial aid may be directed to the Financial Aid Office, 138 Elsie Bull Center, West Chester University, West Chester, Pa. 19383. The telephone number is (215) 436-2627. Office hours are from 9:00 AM to 4:00 PM, Monday through Friday.

## SAMPLE ANNUAL UNIVERSITY BUDGET (BASED ON 1986-87 FEES)

**All fees subject to change.**

| | In State | | |
|---|---|---|---|
| | On Campus | Commuter | Out of State |
| Basic Course Fees | $1,680 | $1,680 | $3,076 |
| Room | 1,360 | 1,100* | 1,360 |
| Board | 808 | | 808 |
| Community Center Fee | 20 | 20 | 20 |
| Health Center Fee | 35 | 35 | 35 |
| Student Government Fee (IGA) | 76 | 76 | 76 |
| Books and Supplies | 400 | 400 | 400 |
| Personal | 1,300 | 1,300 | 1,300 |
| TOTAL | $5,679 | $4,611 | $7,075 |

Note: Books and supplies and personal expenses may vary from student to student. Students who are living off campus, but not with their parent(s), should use the same budget as an on campus student.

*Living Allowance

## Satisfactory Academic Progress Policy For Financial Aid

The satisfactory academic progress policy is defined below. This policy is subject to change because of revisions in federal regulations.

*FULL TIME UNDERGRADUATE STUDENTS*
The student must have the official permission of the University to enroll or continue enrollment as a *degree student* and he/she must have *successfully completed* at least *24 new credits* during the previous academic year (fall-spring).

*PART-TIME UNDERGRADUATE STUDENTS ENROLLED FOR 1 TO 5.5 CREDITS PER SEMESTER* — The student must have the official permission of the University to enroll or continue enrollment as a *degree student* and he/she must have *successfully completed all credits* attempted during the previous academic year (fall-spring).

*ENROLLED FOR 6 TO 8.5 CREDITS PER SEMESTER* — The student must have the official permission of the University to enroll or continue enrollment as a *degree student* and he/she must have *successfully completed* at least *12 new credits* during the previous academic year (fall-spring).

*ENROLLED FOR 9 TO 11.5 CREDITS PER SEMESTER* — The student must have the official permission of the University to enroll or continue enrollment as a *degree student* and he/she must have *successfully completed* at least *18 new credits* during the previous academic year (fall-spring).

The Financial Aid Office *reviews the "successfully completed credits" requirement* at the *end of each academic year* (spring semester) for all students, but only upon written request after summer and fall semesters.

*Credits earned during the summer following an academic year* will be used to *make up a credit deficit* during the review for financial aid satisfactory academic progress. The Financial Aid Office *reviews the "official permission of the University to enroll or continue enrollment as a degree student" requirement* at the beginning of *each semester*. In other words, if the student moves from "degree" to "non-degree" between the fall and spring semesters, the student will not be maintaining satisfactory academic progress and spring financial aid will be rescinded. This particular item is *NOT* appealable.

Courses taken at other institutions will be used in the determination of satisfactory progress only if they are accepted for transfer to WCU and count towards the student's degree. The student is responsible for submitting transcripts and evaluations to the Financial Aid Office.

*In addition to the above requirements*, the student *will be expected to complete* his/her four-year undergraduate degree program *within five (5) years*. Therefore, a *full time undergraduate may receive up to, but not more than, ten (10) semesters of aid*. If the student is enrolled on a *part-time basis*, he/she *may receive the prorated equivalent of 10 full time semesters of aid*. For additional information about this, contact the Financial Aid Office.

*FAILURE TO MAINTAIN SATISFACTORY ACADEMIC PROGRESS ACCORDING TO THESE STANDARDS WILL RESULT IN THE LOSS OF FEDERAL TITLE IV FINANCIAL AID FOR AT LEAST ONE SEMESTER, OR UNTIL SUCH TIME AS THE STUDENT IS AGAIN MAINTAINING SATISFACTORY ACADEMIC PROGRESS.*

*DEFINITIONS:*

*ENROLLMENT STATUS:* Full or part-time, based on the student's schedule.

*CREDITS ATTEMPTED;* Credits for which a grade of A+, A, A−, B+, B, B−, C+, C, C−, D+, D, D−, F, P, WF, WP, I, or NG has been received.

*SUCCESSFULLY COMPLETED CREDITS:* Credits for which a grade of A+, A, A−, B+, B, B−, C+, C, C−, D+, D, D−, or P has been received. Grades of NG, AU, CRE, W, WP, WF and I do *not* count as successfully completed credits.

*FEDERAL TITLE IV FINANCIAL AID:* Pell Grant, Guaranteed Student Loan (GSL), Parent Loan (PLUS), College Work Study, Perkins Loan Program, Supplemental Grant (SEOG).

*APPEALS TO THE SATISFACTORY ACADEMIC PROGRESS REQUIREMENTS:* Appeals to the satisfactory academic progress requirements must be made in writing, requesting and fully explaining the reasons for appeal. Appeals Committee may request a personal interview with the student. The *decision* of the Appeals Committee will be based on the merits of the appeal and *will be final*. The Appeals Committee will consult with the financial aid staff if there are any questions/concerns about the appeal. Appeals, when granted, will be for *ONE SEMESTER ONLY. Students* who are *granted appeals will be reviewed for the maintenance of satisfactory academic progress at the end of the "appeal" semester*, with progress determined by the credits attempted and earned during the appeal semester. In most circumstances, only ONE appeal will be granted *during the course of the student's academic career at WCU*.

The Federal Title IV satisfactory academic progress policy also applies to state grant (*not* PHEAA) programs that include the maintenance of progress as an eligibility requirement.

*PHEAA STATE GRANT* SATISFACTORY ACADEMIC PROGRESS *IS DIFFERENT* FROM FEDERAL TITLE IV FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS. IT IS DEFINED AS SUCCESSFULLY COMPLETING A MINIMUM OF 24 CREDITS FOR EACH TWO SEMESTERS OF PHEAA STATE GRANT AID RECEIVED AND IS ESTABLISHED BY PHEAA.

## Academic Level Requirements for GSL/PLUS/SLS

In addition to maintaining satisfactory academic progress, a loan recipient is required to advance to the next academic level for each level of loan borrowed in the GSL, PLUS, or SLS programs. Academic levels for undergraduates are defined as:

| Undergraduate Credits Earned | Level |
|---|---|
| 0 – 31.5 | 1 |
| 32 – 63.5 | 2 |
| 64 – 95.5 | 3 |
| 96 or more | 4 |

## Withdrawal/Enrollment Change and Aid

Students who officially withdraw or change their enrollment status may be entitled to a refund of certain fees, according to West Chester University's policy. (See section entitled "Fees and Expenses.") If that student has been awarded financial aid for the semester in which the withdrawal or enrollment change occurs, a portion of the refund will be *returned to financial aid program funds*.

Financial aid refunds due to withdrawals or enrollment changes are processed in

accordance with federal, state, and awarding agency guidelines and regulations. A student considering withdrawal or an enrollment status change should consult with the Financial Aid Office to determine the impact of that action on current and future financial aid.

## Student Consumer Rights and Responsibilities

You have the right to ask a school —

1. The names of its accrediting organizations.
2. About its programs; its instructional, laboratory, and other physical facilities; and its faculty.
3. What the cost of attending is and what its policies are on refunds to students who drop out.
4. What financial assistance is available, including information on all federal, state, local, private, and institutional financial aid programs.
5. What the procedures and deadlines are for submitting applications for each available financial aid program.
6. What criteria it uses to select financial aid recipients.
7. How it determines your financial need. This process includes how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses, etc. are considered in your budget. It also includes what resources (such as parental contribution, other financial aid, your assets, etc.) are considered in the calculation of your need.
8. If you have a loan, what the interest rate is, the total amount that must be repaid, the length of time you have to repay the loan, when you must start paying it back, and any cancellation and deferment provisions that apply.
9. If you are offered a work study job, what kind of job it is, what hours you must work, what your duties will be, what the rate of pay will be and how and when you will be paid.
10. To reconsider your aid package, if you believe a mistake has been made.
11. How the school determines whether you are making satisfactory academic progress, and what happens if you are not.
12. What special facilities and services are available to the disabled.

You have the responsibility to —

1. Review and consider all information about a school's program before you enroll.
2. Pay special attention to your application for student financial aid, complete it accurately, and submit it on time to the right place. Errors can delay your receiving financial aid.
3. Provide all additional documentation, verification, corrections, and/or new information, requested by either the Financial Aid Office or the agency to which you submitted your application.
4. Read and understand all forms that you are asked to sign and keep copies of them.
5. Accept responsibility for the promissory note and all other agreements that you sign.
6. If you have a loan, notify the lender of changes in your name, address, or enrollment status.
7. Perform in a satisfactory manner the work that is agreed upon in accepting a college work study job.
8. Know and comply with the deadlines for application for aid.
9. Know and comply with your school's refund procedures.

THE FOLLOWING IS A BRIEF DESCRIPTION OF THE FINANCIAL AID PROGRAMS AVAILABLE AT WEST CHESTER UNIVERSITY.

## College Work Study Program

Employment program involving part-time work on campus. Application is made through the WCU Financial Aid Application, and a Pennsylvania State Grant & Federal Student Aid application must be filed. The deadline is May 1.

## Perkins Loans Program

A loan program administered by the Financial Aid Office. Student must demonstrate financial need. The cumulative limit for borrowing as an undergraduate student is $9,000 ($4,500 during the first two academic years). The cumulative limit for borrowing as a graduate student and undergraduate student is $18,000. The maximum loan offered at WCU is usually $1,000 per academic year. The interest rate is 5% and begins to accrue when repayment commences, 9 months after the student terminates his or her education. There are deferment privileges for students who enter the armed services, Peace Corps, or VISTA after graduation. There are cancellation privileges for special education teachers and teachers in certain school districts. Application is made through the Pennsylvania State Grant & Federal Student Aid application and the WCU Financial Aid Application. Deadline is May 1.

## Guaranteed Student Loan (GSL)

Also referred to as a bank loan, or a state loan guaranty. This loan program operates with the cooperation of private lenders (banks, credit unions, etc.) Students must demonstrate need for a loan. Undergraduate students may borrow up to $2,625 per academic year for the first two academic years, and up to $4,000 per academic year after that. The cumulative limit for undergraduates is $17,250. The academic level maximum amounts are *not guaranteed*. The word "guaranteed" in this program means that the loan is insured by government agencies; it does NOT mean that eligibility is guaranteed. The loan amount is influenced by the receipt of other aid. The interest rate, for first time borrowers, is 8% and begins to accrue when repayment commences, 6 months after the student terminates his or her education. There are deferment privileges for students who enter the Peace Corps, ACTION programs, or the Commissioned Corps of the Public Health Service. Applications are secured at the lending institution. Students should allow 10 weeks for processing. Please apply early. The Guaranteed Student Loan application and the Pennsylvania State Grant and Federal Student Aid Application must be filed.

## Parent Loan for Undergraduate Students (PLUS)

Loan program through a private lender. Parents may borrow up to $4,000 for each dependent student attending a post-secondary educational institution for each academic level. The cumulative limit is $20,000 per dependent student. The academic level maximum amount is *not guaranteed*. The loan amount is influenced by the receipt of other aid. The interest rate is 12% and repayment commences 60 days after disbursement of the loan funds. Applications are secured at the lending institution.

## Supplemental Loans for Students (SLS)

Loan program through a private lender. Independent undergraduate students may borrow up to $4,000 per academic year, with a cumulative limit of $20,000. These loan limits DO NOT include amounts borrowed under the GSL or PLUS programs. The interest rate is 9.5 percent, the repayment period begins on the day the loan is disbursed, and repayment may be extended over a ten-year period. This loan requires a credit-worthy co-applicant. Applications may be secured at lending institutions or directly from PHEAA.

## Short Term Emergency Loan

Students in need of funds to cover unusual or emergency education expenses may contact the Financial Aid Office concerning the Short Term Emergency Loan Program. The maximum loan that will be lent is $125.

## Pell Grant

This is the federal grant program. All students are encouraged to apply for a Pell Grant. Students receive notification of eligibility in the form of a Student Aid Report which *must be submitted* to the Financial Aid Office. Application can be made through the Pennsylvania State Grant & Federal Student Aid application. Deadline is May 1 of the current academic year.

## Supplemental Educational Opportunity Grant

A federally funded grant program administered by the Financial Aid Office. A student must demonstrate financial need and be an undergraduate. The maximum grant is $4,000 per academic year, although *limited funding does not usually allow the awarding of this maximum amount.* Application is made through Pennsylvania State Grant & Federal Student Aid application. Deadline is May 1.

## State Grants

PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY (PHEAA) GRANT. The Commonwealth of Pennsylvania, through PHEAA, makes state grants available to students who demonstrate financial need, are full-time undergraduates, and are Pennsylvania residents. PHEAA requires that students successfully complete at least 24 credits each academic year in which a PHEAA Grant is received. Application is made through the Pennsylvania State Grant & Federal Student Aid application. Deadline is May 1.

*The Commonwealth of Pennsylvania has entered into reciprocal agreements with the following adjacent states: Delaware, West Virginia, Ohio and Maryland. Residents of these states who wish to attend West Chester University are permitted to use state grants from their home states for educational expenses at West Chester. Some other states, not adjacent to Pennsylvania, may permit their residents to use state grants for attendance at West Chester University. Students should contact the agency for higher education within their state for more information.*

## Scholarships and Awards

WEST CHESTER UNIVERSITY ALUMNI ASSOCIATION SCHOLARSHIP FUND. A scholarship fund was established by the Alumni Association of West Chester University in 1974 to benefit the students of West Chester University. The criteria for selection are scholarship, leadership, character, and need. Scholarships may be awarded to sophomores, juniors, and seniors. Applications are available from the Financial Aid Office or the Office of Alumni Relations. The awards are generally made on Alumni Day each year and are applied to winners' course fees for the next academic year. Scholarship amounts vary.

GERALDINE DALEY ANDERSON '34 SCHOLARSHIP. This fund was established to honor Mrs. Geraldine Daly Anderson by a gift from her husband Dr. Robert S. Anderson, M.D. The awards from the fund are restricted to physical education majors who are graduates of high schools in Lackawana, Luzerne, and Wyoming counties in Pennsylvania. Students must also have need and demonstrate academic achievement. Preference will be given to female students. The value of the award varies but will be no less than $300. Applications may be obtained from the Financial Aid Office.

JUSTO B. BRAVO SCHOLARSHIP IN CHEMISTRY. An award available to a full-time student majoring in chemistry. Applications are made to the Department of Chemistry.

LAURY SAMUEL BROKENSHIRE SCHOLARSHIP. This scholarship is presented annually as a memorial to Laury Brokenshire, '59, by his parents, Mr. and Mrs. James R. Brokenshire, of Reading. It is awarded to an outstanding junior class music student selected by the School of Music faculty.

CAVALCADE OF BANDS SCHOLARSHIP. This award is sponsored jointly by the Cavalcade of Bands Association and the School of Music. The recipient(s) must be admitted in good standing to the music program at West Chester University and selected by the director of the winning band(s) in each category of the American and Yankee Conferences. The awards are determined annually. Normally one student from each of the four winning bands will be selected to receive a $1,000 tuitional scholarship.

ROBERT L. CARL MEMORIAL KEYBOARD SCHOLARSHIP. Two scholarships are awarded to freshmen keyboard majors, in honor of the late Robert L. Carl, former chairperson of the Department of Keyboard Music, who taught piano at the University from 1946 until 1971. Applications are made to the faculty director of the School of Music.

PAUL E. CARSON BAND SCHOLARSHIP. This award has been made possible by the generosity of Paul E. Carson, former chairman of the Instrumental Department and a member of the University faculty for 28 years. Scholarships are to be awarded to incoming freshmen majoring in band instruments.

VINCENT D. CELENTANO MEMORIAL SCHOLARSHIP. This scholarship is awarded as a memorial to Dr. Vincent D. Celentano, musician, scientist, and Explorer Committee member. Eligible freshman in the School of Music must be affiliated with Exploring or Senior Branch of Scouting.

CLASS OF 1920 SCHOLARSHIP. This fund was established by the Class of 1920 through a gift on the occasion of the class's 65th reunion.
The award is made to a student who has completed one year of study at the University or to an outstanding freshman. Need and leadership qualities are essential. The amount will be no less than $500. Application forms are available through the Financial Aid Office.

CLASS OF 1937 SCHOLARSHIP. This scholarship fund was established by the Class of 1937 as a golden anniversary gift to West Chester University on the Fif-

tieth Reunion of the class. The scholarships are awarded to entering freshmen based on scholarship, leadership, character and financial need. The awards are generally made on Alumni Day each year and are applied to tuition fees for the academic year.

Applications are available from the Office of Alumni Relations or the Financial Aid Office. Selection of recipients will be made by the Scholarship Committee of the Alumni Board of Directors.

CLASS OF 1970 SCHOLARSHIP. This fund was made available through the Class of 1970 on the occasion of the class's 15th reunion in 1985. The award is to be made to a student who has demonstrated academic achievement and good university citizenship. The amount is no less than $100. Application forms are available through the Financial Aid Office.

GRACE COCHRAN RESEARCH ON WOMEN AWARD. An annual $100 award in each division, graduate and undergraduate, for the best research on women. The award, sponsored by the Institute for Women, is given on Research on Women Day held in April of each year. Dr. Cochran, an eminent teacher and scholar, graduated from the West Chester State Normal School in 1906.

CONGRESSIONAL TEACHER SCHOLARSHIP PROGRAM. This program offers awards of up to $5,000 per year to students who are pursuing a course of study leading to certification as a teacher at the elementary or secondary level and who are willing to enter into a signed agreement with PHEAA that obligates them to teach two years of elementary or secondary school for each year they received a Congressional Teacher Scholarship. To be eligible, students must be or have been in the top 10 percent of their high school graduating class. Applications are available at high school guidance offices or the Financial Aid Office.

FREDERICK DOUGLAS MINORITY STUDENT SCHOLARSHIP. Scholarships are available to minority students who are enrolled full-time. Applicants must demonstrate their ability to make a positive contribution to the University and/or community through active involvement. Applications and guidelines are available during the spring semester in the Financial Aid Office.

DR. ROBERT E. DRAYER MEMORIAL AWARD. An annual award for the senior who graduates with the most distinguished record in history, in memory of Dr. Robert E. Drayer, assistant professor of history, who died in 1968. The Department of History selects the recipient.

FACULTY AWARD. A certificate presented annually to a graduating senior in the Department of Nursing who, in the opinion of the department faculty, demonstrates "outstanding ability and exceptional commitment to professional nursing."

FACULTY SCHOLARSHIP FUND. Annual awards of $200 each are made each May to undergraduate students. Awards are made on the basis of academic ability and financial need. Applications are made to the Faculty Scholarship Fund.

WEST CHESTER UNIVERSITY FOUNDATION GRANT. The West Chester University Foundation has available modest funds for grants to needy students. Any student who is about to complete, or has completed his/her freshman year may apply. In evaluating applications, special attention will be given to those who are active in all facets of university life. Applications for the fall semester should be submitted by May 1, and for the spring semester by December 1 of each year.

H. RAYMOND, SR. AND MAY GRAYSON FRIDAY MEMORIAL SCHOLARSHIP. This scholarship, awarded to a freshman voice major, is given by Dr. Raymond Friday in memory of his parents.

MIRIAM GOTTLIEB PIANO SCHOLARSHIP. This award has been made possible through the generosity of Mrs. Miriam Gottlieb, who was a member of the University's Keyboard Department faculty from 1946 until her retirement in 1975.

ARTHUR E. JONES MEMORIAL SCHOLARSHIP. Talent in the choral conducting area is consideration for this annual award to a music student in remembrance of Dr. Arthur E. Jones, former chairman of choral music. To be eligible, a student must be a junior who has completed a course in choral conducting. A 2.0 GPA and a 2.5 music GPA are required. The Department of Vocal and Choral Music selects the recipient.

WALKER HAMILTON, JR. MEMORIAL AWARD. As a memorial to Walker Hamilton, Jr., an associate professor of English who died in 1968, the Department of English annually makes an award to an academically superior English major. The recipient must have completed three years at West Chester.

FRITZ K. KRUEGER MEMORIAL VOICE SCHOLARSHIP. Two scholarships for freshman students who are vocalists in honor of the late Fritz K. Krueger, who taught in the Department of Vocal and Choral Music from 1961 until 1971. Applications are made to the faculty director of the School of Music.

LEWIS H. MARSHALL AWARD. An annual award to a senior in the social and behavioral sciences whose leadership, professional promise, and academic achievement are outstanding. It is made available by the Chester County Association of Township Officials, and the awardee is selected by a committee of faculty selected from appropriate disciplines.

S. POWELL MIDDLETON MEMORIAL SCHOLARSHIP. An annual award to a freshman music student for talent and achievement on an orchestral instrument. The award honors the former conductor of the University Symphony Orchestra who died in 1970.

MINORITY ACADEMICALLY TALENTED STUDENT SCHOLARSHIPS. Merit-based scholarships available to incoming freshmen minority students. Awards are based on the successful completion of an academic high school program, satisfactory SAT/ACT scores, high school rank, and academic record. The Pennsylvania State Grant and Federal Student Aid application *must also be completed*. For additional information and application forms, contact either the Admissions Office or the Financial Aid Office.

LLOYD C. MITCHELL PIANO SCHOLARSHIP. This scholarship was established in honor of Dr. Lloyd C. Mitchell upon his retirement in 1971 after 35 years service at the University, including 20 years as chairman of the Music Department and dean of the School of Music. It is awarded annually to a freshman music student selected by a piano faculty jury. Applications are made to the faculty director of the School of Music.

CLIFTON E. MORGAN MEMORIAL AWARD. Presented annually to a West Chester student as a memorial to a mem-

ber of the Department of History, who died in 1974.

MICHAEL MOROCHOKO MEMORIAL PIANO AWARD. The Department of Keyboard Music presents a scholarship annually to an outstanding junior music student majoring in piano. This award is a memorial to Michael Morochoko, father of a former student.

SOPHOMORE MUSIC SCHOLARSHIP. Three scholarships given annually to music education sophomores. Criteria: University citizenship and musical performance. A 2.0 GPA and a 2.5 music GPA are required. Applications are made to the faculty director of the School of Music.

NATIONAL GUARD OFFICERS SCHOLARSHIP PROGRAM. Upon certification by the appropriate National Guard official as being eligible, students may register for a given semester by paying twenty-five percent (25%) of tuition costs plus all other fees. The University will bill the National Guard directly for the remaining seventy-five percent (75%) of the tuition charges.

NEW JERSEY ALUMNI SCHOLARSHIP. The New Jersey Chapter of the West Chester University Alumni Association sponsors two $500 scholarship awards annually. These awards are available to students who are residents of the State of New Jersey. They are funded by the contributions of New Jersey alumni. Applications may be obtained through the Financial Aid Office and the Alumni Relations Office.

THEODORA PANDEL MEMORIAL PIANO SCHOLARSHIP. This award is presented through the generosity of Praxiteles Pandel, associate professor of piano, to the highest ranked competitor in the annual High School Keyboard Competition who enrolls as a piano major in the School of Music at West Chester University.

HILLARY H. PARRY MEMORIAL SCHOLARSHIP. An annual award to a junior music student, granted for scholarship, citizenship, and achievement in vocal study. The scholarship is in remembrance of a former teacher of voice. A 2.0 GPA and a 2.5 music GPA are required.

PHI MU ALPHA, SINFONIA POWELL MIDDLETON AWARD. An annual award in memory of S. Powell Middleton, presented by the Rho Sigma chapter of Phi Mu Alpha Sinfonia men's music fraternity. It is based on outstanding musicianship, scholarship, and character. Applications are made to the faculty director of the School of Music.

DEPARTMENT OF PHYSICAL EDUCATION SCHOLARSHIP. Three scholarships awarded to any sophomore, junior or senior student in health and physical education. Applications are made to the Department Chairperson, Physical Education Department.

PRESSER SCHOLARSHIP. This is a grant of $1,000, consisting of $500 from the Theodore Presser Foundation and $500 from the School of Music, to be applied toward tuition in the student's senior year. It is awarded by the president of the University to the student majoring in music who achieved the highest cumulative GPA at the end of the junior year, having completed no less than 95 credits at West Chester University. This student in his/her senior year will be known as the Presser Scholar, denoting a reward for excellence with the hope that the award will help the student not only financially but also in his/her future career

WILLIAM PYLE PHILIPS SCHOLARSHIPS. Awarded annually to juniors and seniors who are natives of Chester County on the basis of demonstrated scholastic ability. Funds are available for approximately 20 scholarships to cover the basic fee. Application forms may be secured in the Financial Aid Office.

N. RUTH REED HEALTH DEPARTMENT SCHOLARSHIP. Sponsored by the West Chester University Health Department. Applicant must be a student at West Chester University, an undergraduate health major, sophomore academic status or better, possess a cumulative grade point average of at least 3.00, and demonstrate high moral character, positive personality traits, and evidence of genuine interest and aptitude in working in the health field. For information contact the Health Department.

SCHOLARS IN EDUCATION AWARD PROGRAM. This program offers awards to Pennsylvania residents, enrolled in teacher education programs in mathematics or science. The program is based entirely on academic achievement and teaching commitment. Applications are available at high school guidance offices or the Financial Aid Office.

DAVID M. SENSENIG MEMORIAL SCHOLARSHIP. $50 savings bonds given annually to two juniors with outstanding ability in mathematics. Dr. Sensenig was chairman of the Department of Mathematics from 1895 to 1908. The scholarship fund is administered by the Alumni Association of West Chester University.

DR. AHMAD H. SHAMSEDDINE MEMORIAL AWARD. An annual award for an outstanding student in the field of business and economics, in memory of Dr. Ahmad H. Shamseddine, associate professor of economics, who died in 1971.

ANNE M. SCHAUB MEMORIAL SCHOLARSHIP. The Anne M. Schaub Memorial Scholarship is awarded annually to a second semester sophomore women's health and physical education major student. The amount of scholarship is $300.00

SCHOOL OF MUSIC FRESHMAN STRING SCHOLARSHIP. Two scholarships are awarded to incoming freshman students who are string majors.

SICO FOUNDATION SCHOLARSHIPS. Scholarships, in limited number, provided by the SICO Company are provided for four years of study at West Chester University at a rate of $1000 per year ($4,000 total value). High school students qualified for college admission or high school graduates who have not attended college on a full-time basis may compete for a SICO Foundation Scholarship when their legal residences are located in the state of Delaware, or in the area included in the counties of Adams, Berks, Chester, Cumberland, Dauphin, Delaware, Lancaster, Lebanon, and York in Pennsylvania, or in Cecil County, Maryland. A student attending the Shippensburg, Boyertown, Spring-Ford, or Williams Valley High Schools in Pennsylvania, or the Del-Mar High School in Delaware, whose residence is outside the aforementioned area is considered in the SICO Company service area and may apply for a scholarship. No distinction is made on the basis of sex, race, or religious belief. Information may be secured from high school guidance offices in the above-referenced areas.

SIGMA ALPHA IOTA LOIS ALT AWARD. The Epsilon Epsilon Chapter of this academic music fraternity for women offers yearly an award honoring Lois W. Alt, a member of the Vocal/Choral Department faculty and co-foun-

der/advisor of the campus chapter. The award is based upon University leadership, high musical standards, and need.

ROB SIMON MEMORIAL AWARD. This award has been established by Joseph and Janice Simon, alumni of the School of Music, and Dr. Irving H. Cohen, a member of the School of Music faculty, in memory of Rob Simon, who was a double bass major at the University. The competition is open to double bass majors during their junior or senior year.

GREG SMITH MEMORIAL SCHOLARSHIP. An annual scholarship of $100 presented by the baseball club in memory of a former baseball captain and president of the baseball club.

W. W. SMITH CHARITABLE TRUST. The W. W. Smith Charitable Trust was established in 1977 under the will of William Wikoff Smith, an important supporter of educational opportunity in the Delaware Valley. Established through his will, the W. W. Smith Charitable Trust has carried on Smith's work. Funds from this program are used to support students enrolled in the Academic Development Program at West Chester University. For additional information, please contact the Director of the Academic Development Program or the Financial Aid Office.

JANE B. SWAN SCHOLARSHIP. Sponsored by the Women's Institute of West Chester University, $100 is awarded annually to a non-traditional woman student who is completing an interrupted education. Application forms are available at the Women's Center and the Financial Aid Office.

THE CHARLES S. SWOPE SCHOLARSHIP FOUNDATION. A Memorial Scholarship Trust Foundation established by the Swope family in memory of Dr. Charles S. Swope, who served as president of West Chester University for a quarter of a century. In order to apply for the scholarship "the student must be enrolled in the junior year and have a desire to engage in the teaching profession." Applications for the scholarships which are awarded in the amount of $1,000 each, must be filed with the Trustee Committee on or before April 1 of each year. The selection is made by the committee during May, and scholarships commence in September. The number of scholarships annually is in the range of ten to fifteen.

WILKINSON MUSIC THEORY SCHOLARSHIP. This scholarship is awarded to a sophomore music student during the spring semester on the basis of talent and achievement in the areas of music theory, ear-training, and sight singing. The scholarship fund has been established by Dr. Harry Wilkinson, current chairperson of the Music Theory/Composition Department.

WRITING AWARD. A certificate presented annually to one junior and one senior nursing student who demonstrate "outstanding writing ability." The recipient is selected by the faculty of the department.

RUTH WALDMAN ZOLL '28 SCHOLARSHIP. This fund was established through the generosity of the late Mrs. Zoll. These scholarships are especially for students who have significant need. One scholarship each year is reserved for a student entering the University from a high school in Berks County where Mrs. Zoll resided. Award amounts vary and application forms may be obtained from the Financial Aid Office.

# Student Affairs

The administration of West Chester University is committed to providing a comprehensive educational experience for students. The Division of Student Affairs is that part of the University which provides a variety of services and programs to augment the classroom experience. The goal of the division is to assist students in their emotional, social, and psychological growth and to contribute to developing a campus community where knowledge, acceptance, and social concerns are basic values.

The administration believes that students should share the responsibility for governing their community and should have a voice in shaping the objectives of the University. Through a democratically constructed student government and committee machinery, the administration, faculty, and student body seek to work together in behalf of the general welfare of the University.

## Classification of Students

Students who attend West Chester University are classified for administrative purposes into two categories.

(1) RESIDENT STUDENTS
These students live in residence halls operated by the University. Resident students are required to take meals in the dining hall.

(2) OFF-CAMPUS STUDENTS
This classification covers students who travel or commute to and from their legal residence as well as students who live away from the homes of their parents or legal guardians in a dwelling which is not supervised or approved by the University.

## On-Campus Housing

The residence halls on the campus provide accommodations for approximately 3,000 resident students. These students cannot be guaranteed housing for their full four years.

*Room Assignments* — The Residence Life Office makes the room assignments for all students living in the residence halls. These assignments are made without discrimination. Only individuals of the same sex will be assigned as roommates. Student rooms have basic furnishings for comfortable living and the students may make them more homelike with their own accessory additions. During orientation, students are informed about the services and equipment furnished by the University and those necessities which they must supply for themselves. Lounge and recreation areas, storage rooms, television, and a variety of other facilities

and conveniences provide a pleasant setting for student life.

*Freshman Students.* All freshmen — both men and women — who have been accepted as resident students have the opportunity to live in the University residence halls.

*Transfer Students.* Transfer students are admitted both as resident students and as commuting students. Those who have been admitted as commuting students and desire accommodations in residence halls may apply in the Residence Life Office to be placed on a waiting list. Priority is based on the date the application is received.

*Married Students.* The University has no housing facilities for married students. Prior to registration, they will need to secure their own accommodations in the community.

*Overnight Guests.* If accommodations are available, a resident student may have an overnight guest. Prior approval and registration must be secured from the resident coordinator.

*Policy for Withdrawals.* Resident students must vacate their residence hall within 24 hours of completing the withdrawal form in the Office of the Registrar.

A Damage Fee is required of all resident students.

## Off-Campus Housing

Students who choose to live in the community must secure their own living accommodations. The Residence Life Office in Sykes Union Building will assist students in finding housing by providing a variety of materials such as an up-to-date listing of available housing, an apartment complex guide, and a *Survival Manual to Life Off-Campus.* It is recommended that students interested in this type of living situation begin their housing search as far in advance as possible by contacting the Residence Life Office.

## Dining Accommodations

Dining accommodations are provided in Lawrence Center where all resident students must take their meals. Commuting students may eat meals in the dining room on a semester basis or may obtain meals at the transient rates. Nineteen meals are served cafeteria style every week. Brunch and dinner are served on Saturdays and Sundays. Menus are carefully planned to meet the nutritional needs of active students.

The dining hall staff is not equipped to meet the special needs of students whose health requires medically regulated diets. Special problems should be taken to the Health Center at least two weeks in advance of each semester.

Students who do not have a semester contract for meals may not eat in the dining hall unless they pay the transient fee for an individual meal. If this regulation is violated, the student will be held responsible for payment of the full semester charge for meals in the dining hall.

### University Health Center

To meet emergency and first-aid needs and to perform routine infirmary treatment of minor illnesses and minor surgical conditions, two part-time physicians and five registered nurses are available at a minimal $17.50 per semester cost to full-time undergraduates.

The University Health Center is located in Ramsey Hall and is open seven days a week while school is in session. During the night, all emergencies must go to the Chester County Hospital Emergency Room to be treated. Beyond these services, the University does not furnish medical care or bear the costs of medical or surgical treatment or hospitalization. Student insurance plans are also offered at the Health Center. The community of West Chester has qualified physicians and excellent hospital facilities.

## Insurance Programs

*Only full-time* undergraduate students carrying twelve credits may take advantage of a group medical illness and accident insurance policy approved by the University. The choice of two policies is offered: One is on a nine-month basis only, strictly covering accidents or injuries. The second is on a twelve-month basis, covering both medical illnesses and accidents or injuries.

The University *requires* all students participating in the intercollegiate athletic program and all students who are members of a club of an athletic nature to purchase the minimum coverage or show proof of comparable coverage.

Information about the insurance program is mailed to students prior to registration or may be obtained from the University Health Center.

*Liability Insurance Requirement for Students in Nursing.* See Department of Nursing.

## Student Physical Examinations

In addition to the physical examination required for entering students, a completed physical examination form must be submitted annually to the University Health Center by all students participating in the intercollegiate athletic program and/or a club of an athletic nature.

A current physical examination including a report of a negative tuberculin test or chest X-ray showing no active tuberculosis is mandated by the Pennsylvania Department of Education for all senior student teachers and all junior or sophomore students participating in a field experience in the public schools.

The University Health Center reserves the right to request an annual physical examination by the family physician for any student suffering from a chronic illness. The University may deny admission to, or dismiss, any student whose health would be detrimental to other University students.

No student will be permitted to attend classes until a physical examination form is completed and filed.

These forms are available at the University Health Center.

*Physical Examination Requirement for Students in Nursing.* See Department of Nursing.

## Vehicle Regulations

RESIDENT STUDENTS WITH LESS THAN 63 CREDITS (as of SEPTEMBER of the academic year in which they wish to register a vehicle) ARE INELIGIBLE TO RECEIVE OR PURCHASE A DECAL. ANY COMMUTER STUDENT MAY REGISTER A VEHICLE. THE OPERATION AND REGISTRATION OF THE VEHICLE MUST CONFORM TO COMMONWEALTH VEHICLE LAW AND UNIVERSITY REGULATIONS. *THE DECAL IS VALID ONLY FOR UNIVERSITY PARKING LOTS.*

## Campus Post Office

The University has an on-campus post office, located on the second floor of Lawrence Center. Commuting students requesting a mail box must show a need for the box by applying to the Office of Residence Life which will approve or disapprove the mail box. Resident students receive their mail at their residence halls. To insure prompt delivery, mail sent to resident students should show the student's name, room number, the name of

the residence hall, and West Chester University, West Chester, Pa. 19383.

## University Policy for Storm Closings

When storm conditions affect the operation of the University, announcements are made over local radio and TV stations via a system of code numbers keyed to affected schools. Prefixes indicate whether the school will be closed or open later than usual. West Chester's numbers and applicable prefixes are

853 — University Number; this number with no prefix indicates classes will be cancelled for the day.
2853 — Evening classes will be cancelled.
5853 — School will open 1 hour late.
6853 — School will open 2 hours late.

## University Bookstore

Managed and operated by Student Services Inc., the University Bookstore is located on the ground floor of the Sykes Union Building. In addition to required textbooks, the bookstore carries a full line of school supplies, health and beauty aids, supplementary reading material, physical education uniforms, gift items and the many other "necessities" of student life. Arrangements may be made for student charge accounts subject to certain qualifications. Details are available at the SSI Business Office in Room 211, Sykes Union Building where application for credit may be made. All profits derived from the bookstore benefit the student body through the IGA.

## Sykes Union

This multi-purpose facility brings to the University community a unique approach to educational programming, recreation, social events, dining and cultural activities. The union is truly a meeting place for all members of the University.

Under one roof are lounges, meeting room facilities, recreation and leisure time activities plus a campus deli. Also housed within this complex are the Student Development Office, SSI, bookstore, checkcashing, ticket service, "Quad" newspaper, WCUR radio, and information center.

## Counseling Center

Located on the second floor of Lawrence Center, the Counseling Center provides counseling services without charge to all undergraduate and graduate students at West Chester. The faculty in the Counseling Center includes licensed psychologists who are experienced in working with college students. Students may discuss their concerns, feelings, hopes, and interests freely and in strict confidence.

COUNSELING SERVICES:

Since the Counseling Center provides services for a wide range of concerns, each student's experience will be tailored to his or her request. Students may want to clarify their vocational or educational choices, improve their interpersonal skills, or resolve personal conflicts. Their choice of approach could include one or more of the following counseling center services.

1. *Individual vocational* counseling consists of a one-to-one counseling experience which focuses upon the student's choice of major and vocation. Vocational choice is most solid when it is the outgrowth of understanding one's self. Such understanding requires time and thought and involves the student's identifying his or her own style, values, interests, and abilities. Psychological testing as well as discussion often enhances self understanding.
2. *Individual counseling for personal problem solving* consists of a one-to-one counseling experience where the focus is upon resolving personal conflicts, conflicts with others, and upon improving the student's expertise at making personally meaningful choices. It may also help some people avoid decisions which restrict their personal growth and undermine their well-being.
3. *Group counseling* consists of a small group of peers with one or more counselors. Such groups meet usually once weekly to provide group members with constructive learning about themselves. Groups often have a specific focus. Past groups have focused upon:
   - Elimination of self-defeating behavior
   - Assertiveness training
   - Anxiety management
   - Test anxiety reduction
   - Weight reduction
   - Career exploration
   - Procrastination — how to avoid it
4. *Testing* — Information from psychological tests can be useful in increasing self understanding and can often assist in the process of vocational and educational decision making. The Counseling Center faculty are trained in the administration and interpretation of psychological tests and the student and his or her counselor can decide whether testing might be helpful. Arrangements can also be made at the Counseling Center for taking the Graduate Record Exam and the Miller Analogies Test — two graduate school admissions tests.
5. *Consultation Services* — The Counseling Center faculty also are available to consult with staff and faculty members of the University community. They can assist with crises, program planning, group and interpersonal communications, as well as referrals to other agencies.

## Speech and Hearing Clinic

The services of the Speech and Hearing Clinic, located on the second floor of Wayne Hall, are available to students. The clinic, which the Department of Communicative Disorders maintains as a teaching-training facility, provides diagnostic and therapeutic services for persons with speech and hearing problems. Others who may use the services of the clinic are the University community and residents of West Chester and the surrounding area.

## Career Planning and Placement Services

The professional staff of the Career Development Center work directly with students throughout their years at the University assisting in defining career goals, relating academic preparation to these goals, and, eventually, helping in the search for fulfilling occupations. These services are available throughout the entire calendar year in Lawrence Center, second floor. A career information library is kept current for browsing and research. Graduate school catalogs and other reference material are maintained for students considering graduate school. Other activities of the Career Development Center include seminars and on-campus interviews with potential employers.

A credential service is provided for graduating seniors on an additional cost basis.

## The Intracollegiate Governmental Association

All students, upon payment of their student government fee, are members of the Intracollegiate Governmental Association, which is the student governing body concerning itself with the welfare of all students. Under its constitution, the IGA provides students with experiences in the processes of democratic government.

The elected General Assembly is the IGA's legislative body; the IGA program is administered through its officers and a student committee system. In fiscal matters, in various policy-making areas, and in disciplinary action, final authority rests with the president of the University and the Council of Trustees.

Under guidance from the vice-president for student affairs, the IGA publishes the student newspaper, operates the University radio station, conducts ticket sales for University events, plans and conducts all-campus special events and programs, and financially supports a variety of student organizations.

## Residence Hall Association

The purpose of the Residence Hall Association is to provide for the social, cultural, and educational life of resident students. RHA purchases and maintains recreational equipment, provides social events and aids the residence life staff in educational programming, living conditions, and regulations in the residence halls. Its varied activities stem from representation and participation within the residence halls. Each hall has a representative from every floor and a slate of officers. The officers from every residence hall represent their respective halls in the Residence Hall Association General Assembly. The hall presidents sit on the R.H.A. Board of Presidents, the decision making body of the organization. The board then appoints an executive director to act as official spokesperson for the organization.

## Office of Off-Campus Life

The Office of Off-Campus Life (OCL) is a part of residence life and dedicated to meeting the specific needs of all off-campus students. Located in Room 206 of the Sykes Union Building, OCL is staffed daily from 9:00 a.m. till 4:30 p.m. The responsibilities of this office include the Off-Campus Housing Service, advising the Off-Campus Student Association, and serving as a community resource agent for the University and local government in all areas related to off-campus students.

Additional services provided to off-campus students by OCL include landlord/tenant legal aid information and development of long-range plans and research on the profile and needs of the off-campus students.

## Off-Campus Student Association

Off-Campus Student Association (OCSA) is a student organization whose primary goal is the representation of all students living off campus. OCSA objectives include distribution of University information, designing educational and social programming, and development of positive community relations. Through representation and input to various University committees OCSA represents the ideas and concerns of all students living in the West Chester community as well as students who commute to the University.

The organization encourages students' active participation in all OCSA events. The OCSA office is located in room 226 of the Sykes Union Building (SUB), phone number (215) 436-2279. Meetings are held every Tuesday at 11:00 a.m. in room 114 (SUB). All off-campus students are urged to attend.

## Student Standards

West Chester University students are assumed to be mature persons attending an institution of higher learning for serious purposes. Therefore, all students are expected to accept responsibility for their behavior. In situations that deviate from these ideals, on and off campus, West Chester University's Judiciary System is designed to hear complaints against individual students and groups of students whose behavior is in violation of existing standards of conduct and regulations as outlined in the Student Standards Document.

In encouraging the development of responsible student conduct, the University employs counseling, guidance, admonition, and example, as well as disciplinary proceedings. Students found in violation of the University's rules and regulations may be subject to disciplinary action which could include suspension and/or expulsion. All tuition and fees are forfeited in the event of a loss of housing, suspension, or expulsion.

## Musical Organizations

In conjunction with the regularly scheduled student and faculty recitals, the University maintains the following well-developed musical organizations which contribute to the wealth of fine music on the campus.

THREE UNIVERSITY BANDS. Membership in the Symphonic Band, Concert Band, and Marching Band is determined by the student's qualifications regardless of curriculum.

CHAMBER ORCHESTRA. Membership in this organization is open to all qualified students.

COLLEGIUM MUSICUM. A chamber ensemble specializing in the use of authentic instruments and performance techniques in the music of the Medieval, Renaissance, and Baroque eras. Open by audition.

WIND ENSEMBLE. A band of 50 to 60 outstanding campus wind instrumentalists and percussionists, the ensemble performs difficult music emphasizing contemporary works.

SYMPHONY ORCHESTRA. Membership is determined by the student's qualifications.

INSTRUMENTAL ENSEMBLES AND CHAMBER MUSIC GROUPS. Membership in these groups is determined by the student's qualifications.

THE CRITERIONS. Members of the University jazz lab band are selected by audition.

CONCERT CHOIR. This mixed choir of approximately forty music students selected by audition meets twice a week, devoting its efforts toward acquiring a fine technique of choral singing through the preparation of an extensive repertoire for performance.

CHAMBER CHOIR. Members of this choir, which performs music of the Renaissance and baroque periods, are selected by audition.

FRESHMEN CHOIR. A required course for music education freshmen.

MEN'S CHORUS. A required course for music education sophomore men. Open to men of other curricula by audition.

WOMEN'S CHORUS. A required course for music education sophomore women.

MASTERWORKS CHORUS. A mixed chorus of junior and senior music students. Open to other members of the University community by audition.

OPERA CHORUS. The chorus is formed through an elective course devoted to the training of a choral group which participates in opera and operetta production. Membership is by audition.

## Intercollegiate Athletic Program

Athletic activities are an important part of the University experience — indeed, a facet of education. The underlying purpose of West Chester's athletic program is the development of enduring educational values. To achieve this, the athletic programs provide a broad variety of team and individual sports for women and men students.

The women's intercollegiate athletic programs include: basketball, cross country, field hockey, gymnastics, indoor track, lacrosse, softball, swimming and diving, tennis, track and field and volleyball. The men's intercollegiate athletic programs include: baseball, basketball, cross country, football, golf, gymnastics, indoor track, lacrosse, soccer, swimming and diving, tennis, track and field, and wrestling.

West Chester University is a member of the National Collegiate Athletic Association, Eastern Collegiate Athletic Conference and Pennsylvania State Athletic Conference.

West Chester's Health and Physical Education Center and field complex, Hollinger Field House, and Farrell Stadium afford excellent facilities and equipment for the University's broad and varied athletic programs.

## Recreational Services

The Office of Recreational Services has the responsibility for providing leisure time activities for the University community. Recognizing that the needs of individuals differ, Recreational Services provides activities in four program areas.

The *Recreational Sports (Intramurals) Program* affords every student the opportunity to participate in individual and/or group competitive experiences. The Recreational Sports Program seeks to promote health and encourage the wise use of leisure time by the University community. The program is for those students who do not have the time, desire, ability or physical attributes to take part in intercollegiate athletics. Regardless of ability, each participant may successfully take part in over twenty-three individual and team sports.

For members of the student body who enjoy organized sports other than varsity teams, the *West Chester University Sports Club Program* is an ideal program. This program is for both the highly experienced player and for those who are merely interested in learning a new sport for fun or skill. Joining a club provides opportunities for instruction, coaching, socialization, and fun. Physical education majors receive a sports credit through participation in a club program. West Chester University sponsors the following clubs: boxing, fencing, ice hockey, karate, men's rugby, ski, women's soccer, and water polo.

*Outdoor recreation opportunities* are conducted through the Outdoor Adventure Center which provides for participation in low impact, low cost, and people powered outdoor activities. Canoeing, bicycle touring, rafting, caving, cross country skiing, backpacking and summer/winter camping are among the many activities offered through the Outdoor Adventure Center for both novices and seasoned outdoor adventurers.

For those persons who are not interested in participating in formal recreation activities, facilities are made available to the student body for *free play and open recreation*. To add spice to the program, special events are conducted throughout the year and are open to the University community.

## Communication, Forensics, and Theatre

COMMUNICATION CLUB. The Communication Club provides opportunities for students to learn about communication as an area of study, research and application in an informal manner. Social functions, guest speakers, field trips and conferences are provided in conjunction with the Department of Speech Communication and Theatre.

FORENSICS. The University has a strong program in intramural and intercollegiate forensics. Its Forensic Society is the focal point for training in competition in debate, oratory, extemporaneous speaking, after-dinner speaking, discussion, interpretive reading, and other events.

UNIVERSITY THEATRE. Excellent opportunities for experience in theatre are offered through this student organization which functions in the Studio Theatre and the Playhouse. Its major productions, drawn both from the classics and from contemporary drama, are outstanding events for the University and the community as well. All students with an interest in drama are welcome.

## Publications and Radio

THE QUAD, the student newspaper of West Chester University, is published weekly by a student staff with a faculty member as advisor. In addition to its primary role in disseminating news of campus events, the Quad also provides students with practical experience in reporting, editing, and photography, as well as in advertising and the business side of publishing. Students interested in working for the Quad should call the editor at (215) 436-2793 or come to the office, 223 Sykes Union Building.

THE SERPENTINE. This yearbook provides a pictorial and written record of the year's activities at the University. It is edited by a student staff with a faculty advisor. Positions on the yearbook staff are always available for incoming and advanced students. Training and experience in photography, writing, layout, and administration are useful in the publishing industry and many other careers.

COLLEGE LITERATURE. The national journal of scholarly articles on frequently taught literary works is published thrice yearly. Bernard Oldsey, editor.

THE STUDENT HANDBOOK. Detailed information concerning student life is provided by this publication. It is particularly valuable to the incoming student.

STATION WCUR. Sponsored by the Intracollegiate Governmental Association, WCUR serves the University with news, music, and special interviews and programs. The station, operated entirely by students, offers experience in all phases of radio communication.

## Religious Organizations and Places of Worship

Opportunities for fellowship and religious experience are offered by the following groups:

Campus Crusade for Christ
Hillel Club
Newman Student Association
Christian Science Organization
Fellowship of Christian Athletes
Inter-Varsity Christian Fellowship
Chi Alpha Christian Fellowship

The Ecumenical Campus Ministry, is an interdenominational ministry which works with students and the campus community in pertinent religious areas, both personal and social. Through its ministers and its executive director, various programs, including interfaith experiences, are provided.

Students are always welcome at the many places of worship in and near the Borough of West Chester.

## Black Student Union

The Black Student Union, which was formed in 1971, is dedicated to the creation of a relevant atmosphere for black students at West Chester. Black Student Union membership is open to all West Chester students, faculty, and staff — regardless of race, color, or creed — who have a concern for the black cause.

A major purpose of the organization is to broaden and enhance the academic and social life for the black students at the University. The union's democratically structured constitution provides for an executive board elected by the membership. Applications for membership in the Black Student Union are reviewed by the executive board. Application may be made at the Black Student Union office in Sykes Union Building, Room 231.

## The Frederick Douglass Society

Drawing its content from our campus history of social consciousness and its structure from a variety of models in public life, the Frederick Douglass Society of West Chester University is the organization of black professional and non-professional staff at West Chester. Named in 1983 for one of the 19th century's most distinguished advocates of human freedom, the organization is oriented toward self-help and improvement by offering a collective voice in the affairs of the University. Its programs also aim to stimulate other groups on campus to enrich our climate. The society annually raises scholarship funds, and therefore deepens the economic options available to the student body generally and to blacks and other ethnic groups as well. It also seeks, by the example of Douglass, to promote an intellectual standard that is not only grounded in excellence but profoundly rooted in the public mission of higher eduction.

## Institute for Women

The Institute for Women is an independent body designed to represent the interests of women on the campus. It serves as the parent organization for the Women's Center, the Women's Studies Program, and the Title IX and Sex Discrimination Board. The institute is headed by a director and a Board of Directors.

Located in 211 New Main Hall, the institute sponsors a number of activities to enhance the self-esteem and career success of women at the University. The newest activity initiated by the institute is the Woman-in-Residence Program which brings a distinguished woman graduate to the campus to participate in classes related to her field and to meet and talk with faculty and students. The discipline is rotated annually so that each division of the University will have a woman-in-residence every six years (business and public affairs, education, health sciences, humanities, music, and mathematics/sciences). The institute also prepares periodic reports on the status of women at the University. For more information, call (215) 436-2464, 2122.

## Student Nurses Association of Pennsylvania (SNAP)

One of the goals of the Nursing Department is to encourage a commitment to professional nursing. The SNAP organization helps build professional nursing interests and aids in the development of the whole person through various interdisciplinary educational programs and services. SNAP is an adjunct of the American Nurses Association (ANA) and the Pennsylvania Nurses Association (PNA).

SNAP gives students an opportunity to be involved in nursing.

## Honor Societies

ALPHA EPSILON. This society is the West Chester chapter of Omicron Delta Epsilon, an international economics honor society, which recognizes high scholastic achievement in the field of economics. Students must achieve a 3.0 average and have had 12 semester hours of economics with a "B" average to maintain membership in the organization.

ALPHA KAPPA DELTA. This international honor society in sociology is dedicated to promoting interest in the discipline and sociological research that will lead to improvement of the human condition. It is open to students who have completed 12 or more hours in sociology with a minimum average of 3.0 by the junior or senior year.

ALPHA LAMBDA DELTA. The West Chester chapter of this national freshman honor society encourages superior scholarship and continued scholarly development. A 3.5 average for the first two semesters is required for membership. Thereafter a student must maintain a cumulative grade average of 3.0 in order to maintain active membership in the organization.

ALPHA MU GAMMA. The Department of Foreign Languages sponsors a chapter of this national collegiate foreign-language honor society, devoted to promoting the study of foreign languages and encouraging cultural exchange with foreign students.

ALPHA PSI OMEGA. This honorary fraternity recognizes excellence in and dedication to the theatre arts. It is sponsored by the Department of Speech Communication and Theatre and membership is open to all students regardless of major.

ETA SIGMA GAMMA. The Department of Health sponsors the Beta Xi Chapter of this national professional honorary society in health science. Its purpose is to elevate the standards, ideals, competence, and ethics of professionally trained men and women in public health, school health and environmental health. Juniors and seniors in these disciplines who have demonstrated high academic achievement are eligible for membership.

GAMMA THETA UPSILON. Gamma Eta Chapter of this international professional geographical honorary society was established in 1963. The organization promotes professional interest in geography and provides services with the Department of Government and Planning.

KAPPA DELTA PI. Kappa Delta Pi is a national honorary society for junior and senior students in education who excel in scholarship, maintain high personal standards, and are dedicated to the teaching profession.

NURSING HONOR SOCIETY. This honor society, sponsored by the Department of Nursing, was chartered in 1985. Its purposes are to recognize superior achievement, develop leadership qualities, foster high professional standards,

encourage creative work, and strengthen commitment to the ideals and purposes of the nursing profession. The society is in the process of applying for a charter chapter in *Sigma Theta Tau,* the national honor society of nursing.

PHI ALPHA THETA. Organized in 1968, Nu Sigma chapter of this international honor society in history is sponsored by the Department of History. Phi Alpha Theta is open to all who have completed twelve or more semester hours in history with a minimum average of 3.01 and have maintained at least a 3.0 in two thirds of their other course work.

PHI DELTA KAPPA. This is an international honor society in graduate education for men and women who are actively engaged in the profession of education. Its aim is to promote quality education on all levels, particularly in publicly supported education. Results of research are reported in its extensive publications. The West Chester University campus chapter includes over one hundred members from the surrounding area and from the campus.

PHI EPSILON KAPPA. The School of Health Sciences sponsors the Gamma Alpha Chapter of this national, professional, honor fraternity for students majoring in health and/or physical education. Phi Epsilon Kappa seeks to advance the profession of health and physical education.

PHI KAPPA DELTA. This professional fraternity is open to students preparing for administrative careers in business and government. Its objectives are to participate in worthy undertakings on campus in administration and in the community and to promote educational, vocational, and leadership opportunities and experience for all members.

PHI MU ALPHA SINFONIA. Rho Sigma chapter of the professional men's music fraternity was formed at West Chester in 1967. The organization seeks to advance the cause of music in America and to foster the welfare and brotherhood of students of music. Upon approval by the brotherhood prospective members are invited to pledge the fraternity. These prospective members must be at least second semester freshmen.

PHI SIGMA TAU. The Department of Philosophy sponsors the Pennsylvania Rho chapter of this national honor society, which recognizes academic excellence both in philosophy and in general studies. Membership is open to all students, regardless of major.

PI GAMMA MU. The Omega chapter recognizes scholarship in the social sciences and encourages social service. Majors in the social sciences who have demonstrated high academic achievement may become candidates for membership in their junior or senior years.

PI KAPPA DELTA. A chapter of this national honor society for students in competitive forensic activities was established in 1969. Pi Kappa Delta has its base in the Forensic Society.

PI KAPPA LAMBDA. The primary objectives of this national music honor society are the recognition and encouragement of the highest level of musical achievement and academic scholarship. Nominations and elections to membership are the responsibility of the faculty committee of the chapter. Delta Sigma chapter at West Chester University was established in 1978.

PI MU EPSILON. This national mathematics society is open to junior students who rank in the upper-third of their class and have completed 18 hours of mathematics with a minimum average of 3.0. It is also open to sophomores who rank in the top quarter of their class and have completed 3 semesters of the calculus sequence with an average of 4.0.

PSI CHI. A chapter of this national honor society in psychology is sponsored by the Department of Psychology. Membership is by invitation, with scholarship as the major criterion. Psi Chi, under the aegis of the American Psychological Association, endeavors to advance the science of psychology and encourages superior scholarship in all academic fields, particularly in psychology.

SIGMA ALPHA IOTA. Epsilon Epsilon chapter of this internationally incorporated professional fraternity for women in music was formed in 1968. The fraternity is dedicated to service in the field of music. Membership, by invitation, recognizes scholarship and musicianship. Members must be in at least their second semester.

SIGMA TAU DELTA. Under the sponsorship of the English Department, a chapter of Sigma Tau Delta, national honor society for students of English, was established at West Chester University in 1977. This organization has for its major purpose the stimulation of interest in the opportunity for practice and experience in all phases of the study of English language and literature.

## Service Fraternities and Organizations

ALPHA PHI OMEGA. Omicron Upsilon chapter of this fraternity, which is dedicated to service and leadership development, is open to all men of the campus community. Omicron Upsilon chapter conducts many service-oriented activities.

GAMMA SIGMA SIGMA is a national service sorority composed of college and university women. Its bylaws state its purpose: "to assemble college and university women in the spirit of service to humanity. It shall serve to develop friendship among women of all races and creeds through working side by side in the fulfillment of these goals common to all."

THE FRIARS SOCIETY. The Friars Society, which has been established at West Chester for many years, is composed of sophomore, junior, and senior men invited into the organization in recognition of character and leadership. The society's various sevice projects concern the good of the University community.

THE ABBÉ SOCIETY. The Abbé Society is an honorary service society composed of sophomore, junior and senior women. Members are selected on criteria of character, leadership and friendship. Projects conducted by the sisters serve both the community and the University year 'round. The Abbé Society is the complementary organization to the men's Friars Society.

## Social Fraternities and Sororities

The University has a system of social fraternities and sororities, governed respectively by the Inter-Fraternity Council and the Panhellenic Council, a chapter of the National Panhellenic conference. Since their introduction in 1967-1968, the social fraternities and sororities have become an integral part of campus life.

| NATIONAL FRATERNITIES | NATIONAL SORORITIES |
|---|---|
| Alpha Chi Rho | Alpha Kappa Alpha |
| Alpha Phi Alpha | Alpha Phi |
| Kappa Alpha Psi | Alpha Sigma Tau |
| Omega Psi Phi | Alpha Xi Delta |
| Phi Beta Sigma | Delta Sigma Theta |
| Sigma Pi | Delta Zeta |
| Sigma Phi Epsilon | Zeta Phi Beta |

Tau Kappa Epsilon Zeta Tau Alpha
Theta Chi

### The Program Board

The Program Board is a major organization funded through the SSI activity fee. Its goal is to develop an on-going series of co-curricular activities which complement the academic experience, providing events that are entertaining and intellectually fulfilling. The board strives to achieve this end through the mediums of the visual arts (film and video); the performing arts (lecture, theatre and dance); and contemporary performances (concert and cabaret).

### Alumni Association

The West Chester University Alumni Association is an organization of more than 40,000 graduates of the University. The Alumni Association is dedicated to strengthening and furthering the interests of the University.

It maintains a variety of programs designed to serve the University and promote fellowship among the membership. Two major on-campus events are Homecoming held each fall and Alumni Day which takes place in the spring. Geographical groups exist in New Jersey, Washington, D.C., California and various Pennsylvania Committees. The University publication RAMPARTS, the official alumni bulletin, is circulated to members four times per year.

The Alumni Association conducts an annual fund campaign to raise funds for support of University projects.

# Degree Requirements

## REQUIREMENTS FOR THE BACCALAUREATE DEGREE

1. Satisfactory completion of a minimum of 128 semester hours at or above the 100-level, distributed as shown in the curriculum for the student's major field.
2. Achievement of a cumulative grade point average of at least 2.00 (C) and an average of at least 2.00 (C) in the major field.
3. Attendance at West Chester University for at least 30 semester hours of the degree program, normally at least the final 30 semester hours of the degree program.
4. Fulfillment of any special requirements or program competencies which are particular to a department or a school.
5. Fulfillment of all financial obligations to the University, including payment of the graduation fee, and of all other obligations, including the return of University properties.
6. Compliance with all academic requests including the request for Notice of Intention to Graduate filed in the Office of the Registrar.

### NOTES:

Students are permitted to pursue dual majors under the same degree with the concurrence of the participating departments.

Students who do not demonstrate basic proficiency in English or mathematics may be required to take 000-level courses as prerequisites of their degree programs.

### UNI 101 The Student and the University

A one-credit course in college adjustment and exploration is taken as part of the New Student Orientation Program. Graded on a pass/fail basis, this course is required of all new freshmen and of all new transfer students who transfer fewer than 33 credits.

### The General Education Requirements Common to All Baccalaureate Curricula

A broad education must encompass experiences in humanities and the social and natural sciences. At the same time, it must be versatile because of the many new courses and areas of study that are constantly becoming available.

West Chester University's allover curriculum has been planned to allow freedom of choice for the student within educationally sound limits.

The general education requirements which constitute the liberal arts core apply to all freshmen entering West Chester in June, 1980 and thereafter.

All students should consult with their advisors and their departmental handbooks.

## BACCALAUREATE GENERAL EDUCATION REQUIREMENTS

I. **Basic Skills** 8-11 semester hours
English Composition (3-6)[1] and competency test
Mathematics competency test and 3 hours,[2]
designated by major department
Physical Education (2)
(or Health by Petition)

[1]Policy for Placement in Freshman Composition Courses

All entering freshmen with Verbal SAT scores below 450 must complete English 000 (Basic Writing) with a grade of C- or better before they may enroll in English 120 and 121 (Effective Writing I and II, 3 credits each). Students with Verbal SAT scores between 450 and 590 take English 120 and 121. Students with Verbal SAT scores of 600 or above must take English 121.

Exemptions: Students may take a placement test during their summer orientation week; if they pass it, they will be allowed to bypass the composition course they would have taken first according to their SAT scores. (That is, students below 450 who pass the placement test will enroll in English 120; students in the 450-590 group who pass the test will enroll in English 121.)

[2]Policy for Placement in Mathematics

All entering freshmen with Mathematics SAT scores below 450 must complete MAT 000 (Fundamentals of Algebra) with a grade of C- or better before they may enroll in any other mathematics course. Students in this category may take a placement test during their summer orientation program, if they pass it, they may bypass MAT 000 and enter the general education mathematics course directly.

II. **Distributive Requirements** (Approved courses are noted with a ★ in the course listings and below.)**
   A. **Science:** One approved course in three of the following areas: 9 semester hours
      Biology — BIO 100 or BIO 110
      Chemistry — CHE 100 or CHE 102 or CHE 103-104 or CHE 105-106
      Computer Science — CSC 101 or CSC 115 or CSC 141-142
      Earth Science — ESS 101 or ESS 111
      Physics — PHY 100 or PHY 101-102 or PHY 103-104
   B. **Behavioral and Social Sciences:** One approved course in each group plus a third course in a discipline not previously selected: 9 semester hours
      Group I
         Anthropology — ANT 102 or ANT 103
         Psychology — PSY 100
         Sociology — SOC 200 or SOC 240
      Group II
         Economics — ECO 101 or ECO 111-112
         Geography — GEO 101 or GEO 103
         Government — PSC 100 or PSC 121 or PSC 213
   C. **Humanities:** One approved course in each of the following areas: 9 semester hours
      Literature — LIT 165 or CLS 222 or CLS 260-261
      History — HIS 100 or HIS 101-102
      Philosophy — PHI 101 or PHI 180

III. **The Arts** 3 semester hours
   Any courses in the following areas:
   Art, Cinematography, Dance, Music, Photography, Theatre

IV. **Free Electives** 9 semester hours
   These hours are normally completely at the choice of the student. They may not be used to satisfy major, core or cognate requirements except in those programs which have received specific exemptions from the University policy. Some programs may require a speech course. All these free electives must be at or above the 100-level.

   Total: 50 semester hours

   All students are encouraged to complete these requirements in their first two years at West Chester.

V. **Writing Emphasis Courses**
   All students who enter with fewer than 40 credits must take at least three approved writing-emphasis courses at West Chester. Transfer students who enter with 40-70 credits must take two writing emphasis courses. Students who transfer more than 70 credits must take one writing emphasis course. Each writing emphasis course may simultaneously fulfill another degree requirement.

**Students may substitute an approved two-semester entry-level course marked with a † for a course marked with a ★. For example, HIS 101-102 may be substituted for HIS 100. Transfer students who have taken one half of a 6-credit foundation course in a discipline may fulfill the appropriate distributive requirement by taking the other half of this foundation course at West Chester

VI. **Interdisciplinary Requirement**
   A. Freshmen who entered the University in the Fall of 1985 or later must complete an approved interdisciplinary course. Transfer students who enter with 60 credits or more are not required to complete an interdisciplinary course.
   B. An approved interdisciplinary course may be substituted for any course in the Distributive Requirements or in the Arts in the General Education Requirements.
   C. English 121, Effective Writing II, is a prerequisite for all interdisciplinary requirement courses.

VII. **Supplementary General Education Requirements**
   Students in some programs have additional general education or cognate requirements to fulfill in disciplines related to their major discipline. Students should consult with their major program advisor about the requirements which apply to them.

## Foreign Language and Culture Requirements for Bachelor of Arts Degree Candidates

A. Candidates for the B.A. degree in the following departments are required to complete the second half of the intermediate year of a foreign language:

   Art
   Biology
   English
   Foreign Languages (in a second foreign language)
   Liberal Studies
   Mathematics
   Physics
   Social Welfare

   (New freshmen interested in other B.A. degree programs are urged to consult with their departmental advisors regarding the foreign language requirements of the particular programs.)

   Students may satisfy the foreign language requirement by presenting evidence of preparation equivalent to the 202 level either by certificate or by examination. Students who are not qualified to take the 202 course prepare themselves by taking the Elementary (101-102) and/or intermediate (201) course or courses.

B. Candidates for the B.A. degree in other departments have the options of demonstrating foreign language competence through the intermediate level or else demonstrating foreign language competence through the Elementary II (102) level and taking three courses dealing with the related foreign cultural area. Questions regarding the foreign language requirement in these other departments should be addressed to their appropriate department chairpersons. The Foreign Language plus Foreign Cultures option is open to freshmen who entered after May, 1980.

C. Attention is called to the policies regarding taking courses out of sequence, page 34. Testing and placement are handled by the Department of Foreign Languages.

## Foreign Cultures Clusters

Students selecting the Foreign Language plus Foreign Culture option must take three courses in three separate disciplines. All three courses must be selected from the cluster of courses

pertaining to the Foreign Culture Area of the language studied. Approved courses are listed below. Courses taken for foreign cultures credit may not be taken Pass/Fail.

I. Classical Civilization (Latin or Greek)
*Approved courses:* ARH 382, ARH 485, HIS 218, HIS 219, HIS 348, PHI 270

II. France and Francophone Area (French)
*Approved courses:* ARH 383, ARH 385, GEO 303, HIS 420, HIS 427, HIS 435, PHI 415, PSC 342

III. Germany (German)
*Approved courses:* EGE 222, GEO 303, HIS 330, HIS 420, HIS 423, HIS 435, PHI 272, PHI 273, PSC 342

IV. Italy (Italian)
*Approved courses:* ARH 384, HIS 426, PSC 342

V. Latin America (Spanish or Portuguese)
*Approved courses:* ANT 322, ANT 362, ESP 319, GEO 302, HIS 315, HIS 316, HIS 317, PSC 340, SPA 322

VI. Russia and Eastern Europe (Russian or an Eastern European Language)
*Approved courses:* ARH 405, ERU 209, GEO 304, HIS 324, HIS 425, PSC 246

## REQUIREMENTS FOR THE DEGREE OF ASSOCIATE OF ARTS IN THE LIBERAL STUDIES

West Chester University offers an Associate of Arts in liberal studies which can be completed in two years of full-time study or the appropriate equivalent of part-time study.

Students in this program must fulfill the following requirements:

1. Satisfactory completion of a minimum of 64 semester hours at or above the 100-level.
2. Completion of the Associate of Arts General Education Component.
3. Completion of an approved area of concentration consisting of 15 to 21 hours.
4. Achievement of a cumulative grade point average of at least 2.00 (C) and an average of at least 2.00 (C) in the area of concentration.
5. Attendance at West Chester University for at least 30 semester hours, normally the last 30 hours, of the degree program.
6. Fulfillment of any special requirements or program competencies which are particular to a department or school.
7. Fulfillment of all financial obligations to the University, including payment of the graduation fee; and of all other obligations, including the return of University properties.
8. Compliance with all academic requests including the request for Notice of Intention to Graduate filed in the Office of the Registrar.

Students currently enrolled in the University who wish to obtain an AA degree are to declare their intention prior to the completion of 50 semester hours.

## ASSOCIATE OF ARTS IN LIBERAL STUDIES

I. **AA General Education Component** 38 semester hours

A. **THE PAST**[1] — 6 s.h.
One course in each of the following disciplines:
Anthropology
History

B. **THE PRESENT**[1] — 6 s.h.
One course in two of the following disciplines:
Economics
Political Science/Planning
Psychology
Sociology

C. **THE IDEAS OF CIVILIZATION**[1] — 6 s.h.
One course in each of the following disciplines:
Literature
Philosophy

D. **THE SCIENCES**[1] — 6 s.h.
One course in two of the following disciplines:
Biology
Chemistry
Computer Science
Earth Science (Geology or Astronomy)
Physics

E. **THE ARTS** — 6 s.h.
One course in two of the following disciplines:
Art
Cinematography
Dance
Music
Photography
Theater

F. **SKILLS AREA**

| | |
|---|---|
| English Composition[2] | 3 s.h. |
| Mathematics[2] | 3 s.h. |
| Health or Physical Education | 2 s.h. |

II. **Approved AA area of concentration** — 15-21 hours

III. **Free electives to complete 64 semester hours**

### Approved Associate of Arts Concentrations

The areas of concentrations approved for the degree of Associate of Arts in Liberal Studies include the following:

Anthropology
Anthropology/Sociology
Art History
Astronomy
Criminal Justice
Developmental Disabilities
Earth Science
Film Criticism
Geology
History
Holocaust Studies
Literature
Music
Peace and Conflict Studies
Philosophy
Planning (Geography)
Political Science
Political Science/Public Administration
Psychological Services
Psychology
Religious Studies
Sociology
Speech Communication

[1] These requirements are to be fulfilled with courses selected from the list of courses approved as general education courses in the baccalaureate program

[2] On the basis of proficiency or placement tests, some students may be required to take 000-level courses in English or mathematics as prerequisites of their degree programs.

| | |
|---|---|
| Studio Arts | Women's Studies |
| Theatre | Writing |

Students may develop an individualized concentration of 15 to 21 semester hours of courses selected under their advisement. For further information about A.A. concentrations, contact the department offering the concentration or the Academic Advising Center in Lawrence Center.

**Free Electives**

In addition to the requirements of the area of concentration candidates for the degree of Associate of Arts in liberal studies have the opportunity to take two or three courses of their own choosing. Students contemplating continuing in a four-year program requiring competence in a foreign language are advised to select courses which will help them achieve this competence.

### REQUIREMENTS FOR THE DEGREE OF ASSOCIATE OF SCIENCE

See the Department of Instructional Media and the Department of Health.

# Academic Policies and Procedures

## Second Degrees

An individual may pursue a second degree at West Chester University after earning the first degree either at West Chester or some other institution. Such an individual must apply for admission through the Office of Admissions as a transfer student and earn at least thirty hours on campus beyond the requirements of his/her initial baccalaureate program. All requirements for the curriculum in which the second degree is earned must be satisfied. A given course required in both the degree programs may not be repeated for the second degree.

West Chester University does not permit a student to pursue two degrees simultaneously, except in the case of associate degrees and in the five-year program in engineering in cooperation with Pennsylvania State University. Students who wish to pursue a double major for their initial baccalaureate degree should discuss the feasibility of this with appropriate program advisors. (See also page 30.)

## Minor Fields of Study

Students may apply for transcript recognition if they complete an approved minor field of study. Students receive such recognition if they complete 15 to 21 hours of courses selected in consultation with their minor program advisor. Students who have enough flexibility in their major curriculum to fulfill the requirements of a minor must fill out and submit a Minor Selection Application to the Office of the Registrar. To enroll in a minor field of study students must have the permission of both their major and their would-be minor departments.

Minors available at West Chester University include the following: Accounting, Anthropology, Anthropology/Sociology, Art History, Astronomy, Biology, Criminal Justice, Developmental Disabilities, Early Childhood Education, Earth Sciences, Economics, Elementary Education, Ethnic Studies, Film, French, Geography and Planning, Geology, German, Health, History, Holocaust Studies, Instructional Media, Italian, Journalism, Latin, Linguistics, Literature, Mathematics, Music, Peace and Conflict Studies, Philosophy, Physics, Political Science, Public Administration, Psychology, Religious Studies, Russian, School Health, Social Work, Sociology, Spanish, Speech Communication, Studio Art, Theatre, Women's Studies, and Writing.

Specific course requirements may be obtained from the minor program advisors.

## Academic Advising

Under West Chester's advising program, all students have faculty advisors, appointed through their major departments, who counsel them on academic matters throughout their undergraduate years. Students, however, are responsible for seeing that they meet all graduation requirements.

## Changing Majors

A student wishing to transfer from one program of study at the University to another program must file a Change of Curriculum form in the Office of the Registrar. The student must meet the standards for admission into the desired program and must obtain written permission from the department involved. Any courses which were initially accepted for transfer credit from another college are subject to re-evaluation by the department to which the student transfers internally.

## Classification by University Program

*Degree Candidates* — all undergraduates admitted to a degree program or to the undeclared major by the Office of Admissions or through approved internal transfer recorded in the Office of the Registrar.

*Non-degree Students* — special students permitted to enroll for course work toward certification, professional growth, or other purposes. A non-degree student may not earn more than 30 hours of credit at West Chester.

## Academic Classification of Students

The student's class designation is determined by the number of semester hours or credit *earned* as follows:

| | |
|---|---|
| *Freshman* | 0-31 semester hours of credit (inclusive) |
| *Sophomore* | 32-63 s.h. of credit (inclusive) |
| *Junior* | 64-95 s.h. of credit (inclusive) |
| *Senior* | 96 or more s.h. of credit |

Note: In computing the cumulative grade point average, the total number of credits *attempted* is considered. (See "Cumulative Grade Point Average" page 36.)

## Student Class Load

A full-time class load ranges from 12 to 18 semester hours of credits.

## Overloads

Students wishing to carry more than 18 credit hours per semester must secure

permission. Permission to carry more than 24 hours is not granted.

The normal student load for summer sessions is 3 hours for the pre-session, 6 hours for the regular session, and 3 hours for the post-session. Any exceptions to this rule must be approved by the chairperson of the department in which the student is majoring. A student will not be allowed to enroll in more than 15 hours in any one summer nor be allowed to carry more than one additional course per session.

A student should not seek permission to carry an overload if his or her cumulative average is below 2.75.

## Adding a Course

Students may add a course by filing a schedule change form in the Office of the Registrar during the Drop/Add Period. Students will not be permitted to add a course after the end of the Add Period.

## Dropping a Course

A. During the first week of a semester a student may drop a course, thereby receiving no grade, by filing a schedule change form in the Office of the Registrar during the Drop/Add Period.
B. A grade of "W" will be entered on the academic record of any student who drops a course *between the end of the first week and before the end of the fifth class week* or the equivalent in Summer Sessions.

Students may drop a course *between the end of the fifth class week and the end of the tenth class week* and receive a grade of WP or WF from their instructor, only if they have a compelling special reason or emergency.

A student who is doing passing work at the time of approved withdrawal receives a WP, which is not treated as a grade. A student who is failing receives a WF, computed as an F.

After the tenth week of classes, students will receive whatever grade the professor assigns (excluding WF, WP), but are not entitled to selectively withdraw from particular classes.

STUDENTS WHO FAIL TO DROP A COURSE OFFICIALLY CAN EXPECT TO RECEIVE A GRADE OF "F" FOR THE COURSE.

## Withdrawal from the University

Students wishing to withdraw from the University or take a leave of absence must go to the Office of the Registrar and follow the prescribed procedures. If illness or some other emergency interrupts the student's University work, he or she must notify the Office of the Registrar at once. Unless a student withdraws officially, F grades will be recorded for unfinished courses.

## Taking Courses Out of Sequence

Students may not enroll for credit in a more elementary course in a sequence after having satisfactorily passed a more advanced course in that sequence. For example, a student may not enroll for credit in French 101 after having satisfactorily passed French 201.

Similarly, students who enroll in a course which requires less proficiency than placement or proficiency tests indicate they possess may be denied credit towards graduation. Native speakers of a foreign language may not receive credit towards graduation for the elementary course in that foreign language.

## Pass-Fail Policy

1. All sophomores, juniors, and seniors with a cumulative g.p.a. of at least 2.00 are eligible.
2. The pass/fail privilege is limited to one course per semester; only free electives may be taken on a pass/fail basis. A free elective is a course which a student selects outside the major or minor field and which the student is not using to satisfy either specific department requirements or a school or University distributive requirement.
3. A grade of *Pass* carries credit value, but does not affect the cumulative grade point average.
4. A grade of *Fail* is computed into the cumulative grade point average.
5. After contracting for Pass/Fail, the student may not request or accept any grade other than a "P" or "F".
6. This process must be completed by the end of the *eighth* week of the semester or the equivalent in summer school. Forms are available in the Office of the Registrar.

## Auditing Privileges

Anyone may attend the University for the sole purpose of auditing one or more courses by obtaining approval from the Office of the Registrar and paying the regular fee. Full-time students have the privilege of auditing one course per semester without charge, provided they obtain approval from the course instructor and the course does not create an overload situation. If an overload results, students are assessed the per credit rate for each credit in excess of 18. Part-time students may audit one course per semester, provided they obtain the instructor's approval, enroll in the course through the Office of the Registrar, and pay the regular course fee.

Credit is never given to auditors. After the course has commenced, the auditor status may not be changed. The grade of Audit (AU) is recorded on the student's transcript.

## Credit by Examination

Forms to register for credit by examination are available from the Office of the Registrar. A fee of $25 is charged for each course. Credit by examination is a privilege subject to the following conditions:

1. Application occurs during the Drop/Add Period.
2. A cumulative g.p.a. of at least 2.00.
3. Evidence of satisfactory academic background for the course.
4. The student has not already completed a more advanced course which pre-supposes knowledge gained in the course. For example, credit by examination cannot be given for FRE 101 after the student passed FRE 102.

Note: Students who have taken a course but have not achieved a satisfactory grade may not apply for credit by examination for the same course.

## Independent Study

Many departments offer an Independent Study course for students with demonstrated ability and special interests. This course is appropriate when a student has a specialized and compelling academic interest that cannot be pursued within the framework of a regular course.

## Individualized Instruction

Individualized instruction is the teaching of a regular catalog course to a single student. Individualized instruction is offered only when the University has cancelled or failed to offer a course according to schedule.

## Graduate Credit

An undergraduate who is in the final semester of work for the bachelor's

degree and has an overall grade point average of at least 3.0 may, with the permission of the dean of graduate studies, enroll in up to six credits of graduate level course-work. Credits earned may be applied to a master's degree program but not toward the bachelor's degree.

## Student Absence (Cut) Policy

The student absence policy is a graduated policy providing leniency to students (primarily juniors and seniors) enrolled in 300 and 400-level courses and restrictions to freshmen and sophomores in 000, 100 and 200-level courses. The absence policy holds that satisfactory proficiency in course work is the student's responsibility, as is class attendance, but recognizes the importance of the professor in the educational process.

The policy is administered at the student-faculty level.

A student enrolled in a 000-level course is not permitted any unexcused absences.

A student enrolled in a 100-level course is permitted to be absent three times or the equivalent for courses that meet less than three times a week.

A student enrolled in a 200-level course is permitted to be absent six times or the equivalent for courses that meet less than three times a week.

A student enrolled in a 300-level course is permitted to be absent nine times or the equivalent for courses that meet less than three times a week.

A student enrolled in a 400-level course has no specific restrictions. This privilege is given to upperclassmen because of the greater amount of individual research which is expected at the advanced level. An upperclassman taking a lower level course must follow the absence policy of that course.

In the event that the student exceeds the number of cuts allowed for a course, the professor is permitted to lower the final letter grade for the course by one letter grade, or ask the student to withdraw from the course and assign a WP or WF.

This policy does not deal with special circumstances such as preparation and performance in music, theater, athletics and laboratories or professional type duties such as practice teaching. Absences from these courses and duties must be considered on an individual basis by the department and professor responsible for the actual event or duty. On days of an announced quiz, test, or examination, no absences are permitted at any course level.

## Student-Athlete Absence Policy

Responsibility for meeting academic requirements rests with the student athlete. Initially the student is expected, where possible, to schedule classes on days and at hours that do not conflict with athletic schedules. However, in the event that intercollegiate sports unavoidably necessitate missing some classes, the student-athlete *must* make the following preparations and arrangements with professors to be excused from class for competition.

1. Student-athletes are expected to notify their professors *as soon as they know* they will be missing class due to an athletic contest.
   a. In most cases this can be done as soon as the student-athlete receives the game schedule and departure times for away games and the times for home games are identified. The only exception is for rescheduled games. In that event the student-athlete is required to notify the professor of class absence as soon as the game has been rescheduled.
   b. This communication is to be made *in writing* by using the courtesy absence form provided in the Athletic Department Office.
2. Athletes are expected to complete the work required for each class and turn in assignments due on game days *prior* to their due dates unless other arrangements are made with the professor.
3. If a scheduled contest is postponed or cancelled the student is expected to go to class.
4. If a test is scheduled on a game day, the student-athlete shall make arrangements with the professor to make up the test.
5. Athletes are not excused from classes for practice or training room treatment on non-game days.
6. If a student-athlete reaches or exceeds the permissable number of absences under the University "Student Absence Policy" for any course while representing the University in athletic contests, then he or she will not be permitted to have additional absences for any other reasons, except, of course, in cases of extreme emergencies.
7. If the student-athletes follow these procedures, it is hoped that their professors will cooperate with the Athletic Department and its programs and permit absences required by competitive athletic events.

## Exemption from Final Examinations

Students who have attained an A or B prior to the finals, have completed all other course requirements, and have the instructors' permission may waive final examinations. This privilege is subject to several reservations.

1. Any unit examinations given during the final examination period are not subject to this policy.
2. Academic departments as well as faculty may adopt a policy excluding the final examination exemption for certain courses.
3. Mutual agreement between the instructor and the student to waive the final examination should be determined during the week prior to the beginning of the examination period.

The course grade will be the A or B earned exclusive of a final examination grade.

## Grade Reports

After each semester, a report of each student's total cumulative record is mailed to the student at the home address.

## Grading System

| *Grade* | *Quality Points* | *Percentage Equivalents* | *Interpretation* |
|---|---|---|---|
| A+ | 4.33 | 97 or above | Excellent |
| A | 4.00 | 93-96 | |
| A− | 3.67 | 90-92 | |
| B+ | 3.33 | 87-89 | Superior |
| B | 3.00 | 83-86 | |
| B− | 2.67 | 80-82 | |
| C+ | 2.33 | 77-79 | Average |
| C | 2.00 | 73-76 | |
| C− | 1.67 | 70-72 | |
| D+ | 1.33 | 67-69 | Below Average |
| D | 1.00 | 63-66 | |
| D− | 0.67 | 60-62 | |
| F | 0. | 59 or lower | Failure |
| NG | | | No Grade |
| W | | | Withdrawal |
| WF | 0. | 59 or lower | Withdrawal Failing |
| WP | | | Withdrawal Passing |
| Y | | | Administrative Withdrawal |
| AU | | | Audit |

I (Incomplete): a temporary grade replaced by the NG grade in 1980.

NG (No Grade): given when a student fails to complete course requirements by the end of a semester. NG is also given when the instructor does not submit a grade. Students who received an NG should consult with the instructor promptly to take steps to complete the course work within the first nine weeks of the next semester. **If the work is not satisfactorily completed by the end of the ninth week the NG becomes an F.**

W (Withdrawal): given when a student withdraws from a course between the end of the first and the end of the fifth class week of the semester or the equivalent in Summer Sessions. (Effective September, 1980.)

WP and WF: See Dropping a Course," page 34.

Y (Administrative Withdrawal): given under appeal when there are non-academic mitigating circumstances and there is documentation that the student never, in fact, attended class.

## Cumulative Grade Point Average

The cumulative grade point average (g.p.a.), sometimes called the cumulative index, is determined by dividing the total quality points *earned* by the total credit hours *attempted*. The following example, based on a single semester, illustrates:

| | Semester Hours | Grade | Quality Points for Grade | | Quality Points for Course |
|---|---|---|---|---|---|
| 1st subject | 4 | A | 4 | 4 × 4 = | 16 |
| 2nd subject | 3 | B | 3 | 3 × 3 = | 9 |
| 3rd subject | 3 | C | 2 | 2 × 3 = | 6 |
| 4th subject | 3 | D | 1 | 1 × 3 = | 3 |
| 5th subject | 2 | F | 0 | 0 × 2 = | 0 |
| | 15 | | | | 34 |

34 divided by 15 equals a g.p.a. of 2.27.

All grades received during a student's enrollment (except the grades of WP, P and NG and except when a second attempt produces a higher course grade) are included in the cumulative g.p.a. Grades from other colleges excluded.

If a student repeats a course, in an effort to improve an F, D, C, or B grade, he or she must file a Repeat a Course Form in the Office of the Registrar.

## Grade Changes

A grade awarded other than "NG" is final. Final grades can be changed only when there is a bona fide clerical error. ANY INACCURATE FINAL GRADE MUST BE REPORTED IN WRITING TO THE PROFESSOR BEFORE THE END OF THE FOURTH CALENDAR WEEK OF THE FOLLOWING SEMESTER.

NG (No Grade): given when a student fails to complete course requirements by the end of a semester. If the student did not complete course requirements because of such a valid reason as a serious illness or death in the family, the student may be granted permission by the professor to complete the requirement within the first nine weeks of the next semester.

A GRADE OF **NG** IS CHANGED TO AN **F** AUTOMATICALLY IF THE REQUIREMENTS HAVE NOT BEEN COMPLETED BY THE END OF THE NINTH WEEK OF THE FOLLOWING SEMESTER. (The instructor must file a change of an NG grade in the Registrar's Office by the middle of the tenth week of the semester.)

A graduating senior has only thirty calendar days after the end of the term in which he or she intends to graduate to complete all degree requirements including the removal of NG.

## Academic Honors List

The names of students who complete 12 or more hours and achieve a semester g.p.a. of 3.50-4.00 are placed upon the Academic Honors List which is published at the close of each semester. Students who do not want to have their names published should notify the Office of the Registrar at the start of the semester.

## Maintenance of Academic Standards: Probation and Dismissal

A student's scholastic standing at the University is indicated by his or her cumulative grade point average (g.p.a.). Three categories of academic standing have been established: good academic standing, probation, and dismissal. A student remains in good academic standing as long as he or she maintains a minimum cumulative g.p.a. of 2.00 for all work taken at the University. Probation and dismissal are actions taken by the University when a student's g.p.a. falls below an acceptable level at the end of a semester or a summer term.

**Conditions of Probation.** Probation is defined as a trial period during which a student whose cumulative average has fallen below acceptable standards *must* bring his or her average up to those standards or be dismissed from the University. The following rules govern the category of probation:

A. A student shall be placed on probation if he or she has attempted
   * more than 9 and up to 18 semester hours of work with a cumulative g.p.a. of less than 2.00.
   * more than 18 but fewer than 48 semester hours of work with a cumulative g.p.a. from 1.00 to less than 2.00.
   * at least 48 but fewer than 64 semester hours of work with a cumulative g.p.a. from 1.40 to less than 2.00.
   * at least 64 or more semester hours of work with a cumulative g.p.a. from 1.70 to less than 2.00.

B. Probation shall commence immediately at the end of the semester in which the cumulative g.p.a. falls into the range described. A notice of probation shall be printed on the student's transcript, and the student shall be notified by the University that he or she is in danger of dismissal. A student who receives notice of being placed on probation shall *immediately* seek advising, tutoring, and instruction in effective study habits and efficient use of time — in short, take every possible measure to improve the quality of his or her academic performance.

C. A student will be allowed to continue on probation for *no more than 30 semester hours of work* after being placed on probation. If the g.p.a. has not reached an acceptable level by that time, the student will be dismissed from the University. A student is removed from probation when the cumulative g.p.a. rises to 2.00 or above.

NOTE: This does *not* prevent individual departments from requiring an average higher than 2.00 as a condition of acceptance or retention.

**Dismissal from the University.**

A. A student shall be *dismissed* from the University if he or she has attempted
   * more than 18 but fewer than 48 semester hours of work with a cumulative g.p.a. of less than 1.00.

* at least 48 but fewer than 64 semester hours of work with a cumulative g.p.a. of less than 1.40, whether he or she has previously been placed on probation or not.
* at least 64 or more semester hours of work with a cumulative g.p.a. of less than 1.70, whether he or she has previously been placed on probation or not.

NOTE: A student shall also be dismissed if he or she fails to meet the standards set under Paragraph C above.

B. A student may petition for an exception to a dismissal action. Petitions are available from the associate vice-president for academic affairs.

C. Nothing in this policy shall be taken to preclude the dismissal of students for violations of other University policies, in accordance with the provisions of those policies.

**Readmission of Dismissed Students.**

A. A student dismissed from the University may not take course work at the University until readmitted by the University. No student will be readmitted earlier than *one full calendar year* after the time of dismissal.

B. Students readmitted to the University *must* maintain a full 2.00 g.p.a. for *each semester* of work following readmission, and after the completion of no more than 48 semester hours (or prior to graduation, whichever comes first), must obtain an overall cumulative g.p.a. of 2.00 for all work taken at the University. A student who fails to meet this standard shall be dismissed from the University a second time and is not eligible for future readmission.

**Cumulative Grade Point Average Required for Graduation.**

A cumulative g.p.a. of 2.00 is required for graduation from West Chester University. Specific programs, in accordance with University procedures, may set other higher requirements.

## Room Reservation Policy for Reinstated Students

Those students living in University dormitories who are in academic difficulty at the close of the spring semester should consult with the housing office as to their eligibility for continued housing on campus.

## Repeating Courses

Students may repeat a course to improve a grade of F, D, C, or B (Not A). Beginning with the Fall, 1985 Semester, no student may use the repeat policy more than five (5) times, nor may he/she repeat a single course more than twice.

The first time a course is repeated, only the second grade is computed into the GPA. If the course is repeated a second time, both the second and third grades are computed into the GPA.

Students who repeat a course will not earn additional credits in such a course towards their degree and in the event that the computer adds such credits to the student's records, these will be subtracted at the time of final clearance for graduation.

Students who receive a D or F in a 000-level course must repeat this course before enrolling in a more advanced course.

This policy does not apply to courses a student takes over at an institution other than West Chester. (See "Taking Courses Off Campus.")

## Taking Courses Off Campus — Transient Student Status

West Chester University students who wish to enroll at another institution and have the credits count towards a West Chester degree fill out and turn in a Transient Student Application in the Office of the Registrar prior to enrolling at the other institution. Grades received in courses taken at other institutions are not calculated into the West Chester cumulative grade point average, only the credits may be transferred. Students who fail a course at West Chester may not repeat the course at another institution and have the credits count towards a West Chester degree.

In case of doubt as to which West Chester course is equivalent to the course to be taken elsewhere, the student should consult with the chairperson of the West Chester department offering the course or consult the transfer credit analyst.

## Transfer of Credit

Advanced credit may be granted for equivalent courses completed in accredited institutions of collegiate grade. Credit for work completed at an unaccredited institution may be granted upon the recommendation of the student's major department in consultation with the faculty dean and transfer credit analyst. (See also Admissions.)

Effective for students who entered the University after September, 1973, D grades are accepted for transfer if the credit is for equivalent courses within the framework of general requirements or free electives, provided the transferred course does not satisfy a major field requirement as well.

D grades considered for transfer for a major program requirement are treated in the same manner as the major department treats D grades earned at West Chester, that is, the student's major department may require the course to be repeated.

If the student is required to repeat a course in which a D was obtained, the course originally considered for transfer will not be accepted for any type of credit.

Likewise, if a student changes his or her major, D grades originally approved for transfer will be re-evaluated by the new major department.

IN ORDER TO RECEIVE FULL CREDIT FOR COURSES TAKEN ELSEWHERE AND FOR PROFICIENCIES DEMONSTRATED ON ADVANCED PLACEMENT OR CLEP EXAMINATIONS, THE TRANSFER STUDENT SHOULD HAVE THIS WORK EVALUATED PRIOR TO ENROLLING IN ANY POTENTIALLY EQUIVALENT COURSE AT WEST CHESTER.

## Policy on Correspondence Courses

The University does not allow credit for courses taken through correspondence.

## Advanced Placement Program

Courses taken under the Advanced Placement Program offered by the College Entrance Examination Board may be applied toward advanced placement in the University and/or toward credit requirements for graduation. The University recognizes the grade of 3.0 or above as acceptable.

## College Level Examination Program (CLEP)

West Chester University encourages the non-traditional student to use CLEP subject examination especially if he or she has not yet applied for admission to West

Chester University. While a non-traditional student may utilize CLEP exams after gaining admission to WCU, the student is urged to examine carefully the merits of the credit-by-examination option for individual courses offered by the University. Traditional students (those who are admitted immediately after high school) should take advantage of advanced placement or credit-by-examination options available at West Chester University.

West Chester University accepts SUBJECT Examinations in which the score is greater than the 50th percentile. Course credit is given only where the Subject Examination can be applied to specific courses offered, most commonly in the general requirements program or in free electives. Those interested should become familiar with the subject areas included in such programs of general study. Courses are accepted as degree credit only; while no grade is recorded, a specific number of credit hours is recorded.

West Chester does NOT accept the General Examination of CLEP.

## Requirements for Graduation

A student is recommended for graduation upon the satisfactory completion of a minimum of 128 semester hours and upon fulfillment of all categories of the requirements for his/her degree. A minimum cumulative g.p.a. of 2.00 (C) is required for graduation. Degree requirements are detailed under the heading of the subject field. See also "Requirements for the Baccalaureate Degree." A student must file for graduation at the beginning of the semester in which the student will complete the requirements.

Any senior who does not complete all degree requirements within thirty calendar days of the end of the term in which he or she intends to graduate must pay the diploma fee again before an updated diploma will be issued. Such a student, however, does have the right to request a letter from the University confirming his or her graduation after all requirements have been satisfactorily completed.

## Resident Credit Requirement

To qualify for graduation, a student must take at least 30 semester hours of credit at West Chester. Normally the student will take the last 30 semester hours at West Chester.

All students are urged to review their records of progress towards graduation with their advisor and to file for graduation *two semesters* prior to the date of graduation.

## Required Notice of Intention to Graduate

Students intending to graduate in May or August *must* come to the Office of the Registrar and give Notice of Intention to Graduate no later than February 1. August graduates may participate in the May Commencement exercises if they file their notices of intention to graduate by February 1. Students intending to graduate in December must give such notice no later than October 1. The baccalaureate degree will not be granted unless this requirement is met.

After submitting this notice, the student will receive a cap-and-gown order form and a bill for the graduation fee. He or she will also specify how his or her name should be shown on the diploma and commencement program. *Unless the deadline is met, it will be impossible for the University to order a diploma, place the name on the forthcoming commencement program or have the transcript reflect the appropriate date of graduation.*

## Graduation Honors

Graduation honors are awarded as follows:

| | Cumulative G.P.A. |
|---|---|
| *cum laude* | 3.25 — 3.49 |
| *magna cum laude* | 3.50 — 3.74 |
| *summa cum laude* | 3.75 — 4.00 |

The Honors List for Commencement is based upon the mid-semester non-final grade point average. Those who do not attain honors distinctions until the end of their final semester will have recognition of their achievement on their transcripts, where all honors distinctions are recorded.

TO BE ELIGIBLE FOR HONORS DISTINCTIONS, TRANSFER STUDENTS MUST HAVE COMPLETED A MINIMUM OF 64 SEMESTER HOURS, OR FOUR FULL-TIME SEMESTERS, AT WEST CHESTER.

## Transcripts

Requests for official transcripts are made by writing to the Office of the Registrar, E. O. Bull Center. The fee is $2 for each transcript. Checks, payable to the West Chester University, must accompany the request.

## Directory Information — Rights to Privacy Act of 1974

West Chester University from time to time makes public certain kinds of information about students, such as the names of those who receive scholarships, who hold offices, or who are members of athletic teams. Various kinds of campus directories are published throughout the year to help members of the University community locate and communicate with each other. The commencement progams publish the names of those who have received degrees during the year.

The Family Educational Rights and Privacy Act of 1974 defines the term directory information" to include the following categories of information: the student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, date of attendance, degrees and awards received, and the most recent previous educational agency or institution attended by the student. The University will limit information which is made public to categories such as these but will not necessarily publish all such information in every listing.

Undergraduate students who *do not wish* to have any or all of such "directory information" published without their prior consent must file notice in the Office of the Registrar. Graduate students must file notice in the Office of Graduate Studies. A signed, dated statement specifying items not to be published must be brought by the student to the appropriate office within the first fifteen calendar days after the beginning of the fall semester.

## Exemption from Academic Policies

Students may file a petition available from the faculty deans for exemption from academic policies.

# Structure of the University

## FACULTY OF ARTS AND SCIENCES

Anthropology & Sociology
Art
Biology
Chemistry
English
Foreign Languages
Geology and Astronomy
History
Mathematical Sciences
Philosophy
Physics
Psychology
Speech Communication & Theatre

## SCHOOL OF BUSINESS & PUBLIC AFFAIRS

Accounting
Business Administration
Criminal Justice
Economics
Government & Planning
Social Work

## SCHOOL OF EDUCATION

Childhood Studies and Reading
Counselor, Secondary & Professional Education
Instructional Media
Special Education

## SCHOOL OF HEALTH SCIENCES

Communicative Disorders
Health
Nursing
Physical Education

## SCHOOL OF MUSIC

Instrumental Music
Keyboard Music
Music Education
Music History
Music Theory & Composition
Vocal & Choral Music

# Undergraduate Programs at West Chester

Students may enroll at West Chester University in programs leading to the following degree or certificates:

Associate of Arts (AA)
Associate of Science (AS)
Bachelor of Arts (BA)
Bachelor of Fine Arts (BFA)
Bachelor of Music (BM)
Bachelor of Science (BS)
Bachelor of Science in Education (BSED)
Bachelor of Science in Nursing (BSN)
Local Certificate (CERTIF)
Teaching Certificate (TCHG CERT)

## PROGRAM SUMMARY

**Accounting** BS
**American Studies** BA
**Anthropology** AA, BA
**Anthropology-Sociology** AA, BA
**Applied Media Technology** AS
**Art** BA
**Art History** AA
**Athletic Training** BS, CERTIF
**Astronomy** AA
**Biology** BA, BS, BSED, TCHG CERT
**Biology: Clinical Microbiology** BS
**Business** BS
**Business Management** BS
**Chemistry** BS, BSED, TCHG CERT
**Chemistry-Biology** BS
**Chemistry-Biology* (Pre-Medical)** BS
**Chemistry-Geology** BS
**Clinical Chemistry** BS
**Communication** BSED, TCHG CERT
**Communicative Disorders** BA
**Comparative Literature** BA
**Computer Science** BS
**Criminal Justice** AA, BS
**Dental Hygiene** BS, TCHG CERT
**Developmental Disabilities** AA
**Driver-Safety Education** TCHG CERT
**Early Childhood Education** BSED, TCHG CERT
**Earth Science** AA, BS, TCHG CERT
**Earth-Space Science** BSED
**Economics-Business** BA, BS
**Elementary Education** BSED, TCHG CERT
**English (see Literature)** BSED, TCHG CERT
**Environmental Education** TCHG CERT
**Ethnic Studies** CERTIF
**Film Criticism** AA
**Forensic Chemistry** BS
**French** BA, BSED, TCHG CERT
**General Science** BSED
**Geography** BA
**Geology** AA
**German** BA, BSED, TCHG CERT
**Health and Physical Education** BS
**Health and Physical Education/Student Designed Concentration** BS
**Health Education** BS, TCHG CERT
**Health Sciences** BS
**History** AA, BA, BSED
**Holocaust Studies** AA
**Latin** BA, BSED, TCHG CERT
**Latin-American Studies** CERTIF
**Liberal Studies** AA, BA, BS
**Literature** AA, BA
**Marketing** BS
**Mathematics** BA, BSED, TCHG CERT
**Mathematics-Computer Science** BA
**Music** AA, BA
**Music: Composition** BM
**Music Education** BS, TCHG CERT
**Music: Performance** BM
**Music: Theory and History** BM
**Nursing** BSN
**Peace and Conflict Studies** AA
**Philosophy** AA, BA
**Philosophy-Religious Studies** BA
**Physical Education** TCHG CERT
**Physics** BA, BS, BSED, TCHG CERT

**Physics-Engineering** BA, BS
**Physics-Mathematics** BSED, TCHG CERT
**Planning (Geography)** AA
**Political Science** AA, BA
**Political Science-Public Administration** AA, BA
**Psychology** AA, BA
**Psychological Services** AA
**Public Health** BS
**Public Health: Environmental** BS
**Religious Studies** AA
**Respiratory Therapy** AS
**Russian** BA, BSED, TCHG CERT
**Russian Studies** CERTIF
**Secondary Education (See Individual Concentration)** BSED, TCHG CERT
**Social Studies** BSED — Concentrations in Anthropology, Geography, History, Philosophy, Political Science, Psychology, Sociology
**Social Work** BA
**Sociology** AA, BA
**Spanish** BA, BSED, TCHG CERT
**Special Education** BSED, TCHG CERT
**Speech Communication** AA, BA
**Speech Correction** BSED, TCHG CERT
**Studio Arts** AA, BFA
**Theatre** AA
**Theatre Arts** BA
**Women's Studies** AA
**Writing** AA

# Programs of Study and Course Offerings

For the convenience of readers, the arrangement of course offerings is alphabetical by department or area of study.

Students may obtain a typical approved sequence of courses for any of the programs from the office of the appropriate school or department.

All courses, course substitutions, and course sequences are subject to change.

Because many program descriptions refer to courses offered by other departments, the following guide to course prefixes is provided.

## Guide to Course Prefixes (symbols) Used in this Catalog

| *PREFIX* | *DEPARTMENT/PROGRAM* |
|---|---|
| ACB | Instrumental Music |
| ACC | Accounting |
| ACP | Instrumental Music |
| ACS | Instrumental Music |
| ACW | Instrumental Music |
| ADM | Administration, Leadership for Women |
| AEB | Instrumental Music |
| AEO | Instrumental Music |
| AER | Aerospace Studies |
| AES | Instrumental Music |
| AIC | Instrumental Music |
| AIM | Instrumental Music |
| ALC | Instrumental Music |
| AMC | Instrumental Music |
| ANT | Anthropology and Sociology |
| ARH | Art |
| ART | Art |
| ASA | American Studies |
| ASH | History, American Studies |
| BAR | Instrumental Music |
| BAS | Instrumental Music |
| BIL | Biology |
| BIO | Biology |
| BLA | Business Administration |
| BSN | Instrumental Music |
| BUS | Economics |
| CHE | Chemistry |
| CHO | Vocal/Choral Music |
| CLS | Comparative Literature Studies, English |
| CLT | Instrumental Music |
| CRJ | Criminal Justice |
| CRL | Chemistry |
| CSC | Mathematical Sciences |
| ECE | Childhood Studies and Reading |
| ECO | Economics |
| EDA | Special Education |
| EDC | Counselor, Secondary and Professional Education |
| EDE | Childhood Studies and Reading |
| EDF | Counselor, Secondary and Professional Education |
| EDG | Childhood Studies and Reading |
| EDH | Counselor, Secondary and Professional Education |
| EDM | Instructional Media |
| EDO | Counselor, Secondary and Professional Education |
| EDP | Counselor, Secondary and Professional Education |
| EDR | Childhood Studies and Reading |
| EDS | Counselor, Secondary and Professional Education |
| EDU | Counselor, Secondary and Professional Education |
| EDX | Counselor, Secondary and Professional Education |
| ENG | English |
| ESL | Geology and Astronomy |
| ESS | Geology and Astronomy |
| FIN | Economics |
| FLM | English |
| FLU | Instrumental Music |
| FRE | Foreign Languages |
| FRH | Instrumental Music |
| GEO | Government and Planning |
| GER | Foreign Languages |
| GRE | Foreign Languages |
| GTR | Instrumental Music |
| HAR | Keyboard Music |
| HEA | Health |
| HEB | Foreign Languages |
| HIS | History |
| HON | Honors Program |
| HPE | Physical Education |
| HRP | Instrumental Music |
| HTR | Health |
| IND | Geology and Astronomy |
| ITA | Foreign Languages |
| JRN | English |
| KEN | Keyboard Music |
| LAN | Foreign Languages |
| LAT | Foreign Languages |
| LEN | English |
| LIN | Foreign Languages |
| LIT | English |
| LPN | Philosophy |
| MAC | Keyboard Music |
| MAK | Keyboard Music |
| MAT | Mathematical Sciences |
| MGT | Business Administration |
| MHL | Music History |
| MKT | Business Administration |
| MSI | Military Science |
| MTC | Music Theory & Composition |
| MTE | Mathematical Sciences |
| MTL | Mathematical Sciences |
| MUE | Music Education |
| MWJ | Music Theory and Composition |
| MWP | Keyboard Music |
| NSG | Nursing |

| PREFIX | DEPARTMENT/PROGRAM |
|---|---|
| NSL | Nursing |
| OBO | Instrumental Music |
| ORG | Keyboard Music |
| PAD | Government and Planning |
| PEA | Physical Education |
| PED | Physical Education |
| PEL | Physical Education |
| PER | Instrumental Music |
| PHE | Geology and Astronomy |
| PHI | Philosophy |
| PHL | Physics |
| PHR | Physics |
| PHS | Physics |
| PHY | Physics and Pre-Engineering |
| PIA | Keyboard Music |
| POR | Foreign Languages |
| PSC | Government and Planning |
| PSY | Psychology |
| RES | Counselor, Secondary and Professional Education |
| RUS | Foreign Languages |
| SAX | Instrumental Music |
| SCB | Biology |
| SCC | Chemistry |
| SCE | Geology and Astronomy |
| SOC | Anthropology and Sociology |
| SPA | Foreign Languages |
| SPC | Speech Communication and Theatre |
| SPP | Communicative Disorders |
| SSC | Social Studies, Ethnic Studies, Peace and Conflict Studies |
| STA | Mathematical Sciences |
| SWO | Social Work |
| TBA | Instrumental Music |
| THA | Speech Communication and Theatre |
| TPT | Instrumental Music |
| TRB | Instrumental Music |
| UNI | Orientation |
| VCL | Instrumental Music |
| VLA | Instrumental Music |
| VLN | Instrumental Music |
| VOC | Vocal/Choral Music |
| VOI | Vocal/Choral Music |

# Accounting

Clyde J. Galbraith, *Chairperson*
**PROFESSORS:** A. Naggar, T. Hong
**ASSOCIATE PROFESSOR:** Hassler
**ASSISTANT PROFESSORS:** Galbraith, Smith

The Department of Accounting offers a full program of accounting courses designed to prepare a student for entrance into the field of professional accounting: public, private or governmental. Students successfully completing the curriculum should be adequately prepared to take the Certified Public Accountant and Certified Management Accountant examinations.

### BACHELOR OF SCIENCE IN ACCOUNTING

1. General Requirements (Includes ECO 111*, see appropriate curriculum guidance sheet) (see pages 30-32) — 51 s.h
2. Business and Economics Core — 39 s.h.
   ECO 112*, ACC 201*-202*, BLA 201*, ECO 251-252, MKT 301*, MGT 301*, FIN 325, MKT 327, MGT 303, ECO 335, MGT 405
   (*A minimum grade of C must be attained in each of these courses)
3. Other courses required by the Business Program: CSC 101, MAT 107. These courses satisfy and are included under general requirements.
4. Other course required — MAT 108 — 3 s.h.
5. Accounting Major — ACC 301*-302*, ACC 303*-304*, ACC 401*, ACC 403*, ACC 405* — 21 s.h.
6. Economics or Business Electives — 3 s.h.
7. Free Electives — 12 s.h.
8. No more than 63 s.h. in business and economics courses may be taken under the Bachelor of Science in Accounting degree program.
   (*A minimum grade of C must be achieved in *all* accounting courses.)

### Accounting Minor

1. Required — 12 s.h.
   ECO 131, ACC 201-202, ACC 301
2. Electives — 6 s.h.
   Any two of the following courses:
   ACC 302, 303, 304, 401, 403, 404, 407

### ADMISSION AND ADVISING

Students are admitted as majors in general business and advised by the faculty of the Department of Economics until 64 undergraduate credits are completed Thereafter, students may concentrate in accounting if they have met department requirements.

### COURSE DESCRIPTIONS

ACCOUNTING
Symbol: ACC

The objective of the accounting concentration is to prepare students for accounting careers in business, for the CPA examination, and for the private practice of accounting.

**201 Principles of Accounting I (3)** Introduction to financial accounting. A conceptual approach to recording, financial summarizing, presentation and evaluation of the financial affairs of a business firm.

**202 Principles of Accounting II (3)** Introduction to management accounting. Accumulating, processing and interpretation of financial data as an input for managerial decisions of a business firm PREREQ ACC 201

**301 Intermediate Accounting I (3)** Analysis and evaluation of assets, liability, and capital account. Problems of income measurement and recognition PREREQ. ACC 202.

**302 Intermediate Accounting II (3)** Continuation of ACC 301. PREREQ: ACC 301

**303 Cost Accounting I (3)** Techniques of product unit cost determination and uses of cost data in managerial decisions. PREREQ. ACC 202.

**304 Cost Accounting II (3)** Continuation of ACC 303 PREREQ: 303.

**401 Auditing (3)** Introduction to auditing as a tool for verification of the fair presentation of financial statements. PREREQ. ACC 302.

**403 Federal Taxation I (3)** A study of individual and federal income taxes, with some business application. Emphasis on tax planning for minimization of tax liability. PREREQ: ACC 202.

**404 Federal Taxation II (3)** A study of the prin-

ciples of federal income taxation on corporations and corporate distributions, partnerships, estates, and trusts. Emphasis is on tax planning and researching complex problems. PREREQ: ACC 403.

**405 Advanced Accounting (3)** In depth study of business combinations and consolidations, government accounting and other specialized topics. PREREQ ACC 302.

**407 Not-For-Profit and Governmental Accounting (3)** A study of accounting principles and procedures of not-for-profit and governmental organizations. The course includes accounting for federal government, state and local governments, hospitals, colleges and universities, public schools, and charities. PREREQ ACC 202.

**410 Directed Studies in Accounting (3)** Special research projects, reports, readings in accounting. Open to seniors only PREREQ: instructor's approval.

# Air Force ROTC

West Chester University students are eligible to participate in the Air Force Reserve Officer Training Corps (AFROTC) through a cross-enrollment agreement with Saint Joseph's University. All Aerospace Studies courses will be held on the Saint Joseph's campus. The AFROTC program enables a college student to earn a commission as an Air Force officer while concurrently satisfying requirements for his/her baccalaureate degree.

The program of Aerospace Studies at Saint Joseph's University offers both two-year and four-year curricula leading to a commission as a Second Lieutenant in the Air Force. In the four-year curriculum, a student takes the General Military Course (GMC) during the freshman and sophomore years, attends a four-week summer training program, and then takes the Professional Officer Course (POC) in the junior and senior years. A student is under no contractual obligation to the Air Force until entering the POC or accepting an Air Force scholarship. In the two-year curriculum, a student attends a six-week summer training program and then enters the POC in junior year.

Air Force ROTC offers 2, 2½, 3 and 3½ year scholarships on a competitive basis to qualified applicants. All scholarships cover tuition, lab fees, a flat rate allowance for books, plus $100 tax free monthly stipend. All members of the POC, regardless of scholarship status, receive the $100 tax free monthly stipend.

For further information on the cross-enrollment program, scholarships, and career opportunities, contact Professor of Aerospace Studies, AFROTC Det 750, Saint Joseph's University, Philadelphia, Pennsylvania 19131, (215) 879-7311.

## COURSE DESCRIPTIONS

AEROSPACE STUDIES
Symbol: AER

**101 Air Force Today I (1)** Introductory course exploring the military as a profession, including civilian control of the U.S. Armed Forces, function and organization of the U.S. Air Force, organization and operation of U.S. strategic offensive forces.

**102 Air Force Today II (1)** Introductory course exploring U.S. general purpose and defensive forces including mission and organization of the major U.S. Air Force Commands and separate operating agencies, major functions and conduct of joint service military operations. Discusses air defense, detection systems, close air support and air superiority

**201 Development of Air Power I (1)** A study of the development of aerospace power from balloons and dirigibles through the employment of U.S. air power in World War II. The course includes the military theory of aerospace power employment.

**202 Development of Air Power II (1)** A continuation course studying the employment of U.S. air power in the Korean Conflict, relief missions and civic action programs in the later 1960's, and the war in Southeast Asia Research is conducted into the military theory of aerospace force employment

**311 Management and Leadership I (3)** A study of managerial theory, concepts and techniques of decision-making, and the basic functions of management with particular emphasis on applications for Air Force officers.

**312 Management and Leadership II (3)** An interdisciplinary approach to leadership which includes the study of human behavior and relationships, motivation, professional ethics and leadership styles. Communication skills are stressed through written and oral assignments.

**431 National Security Forces I (3)** A focus on the Armed Forces as an integral and inseparable element of society. Primary emphasis is placed on the overall national security process and the factors which comprise it The impact of a nation's military, economic, psychological, and technical components on national security policy is examined Other topics include major geopolitical hotspots and the origin of arms races.

**432 National Security Forces II (3)** A continuation course studying civil-military relations. Topics include civilian control of the military, conflict control, military professionalism, and military justice. Emphasis is placed on the reciprocal responsibilities of civilians and the military in a democratic society.

# American Studies

AMERICAN STUDIES COMMITTEE
Walter J. Fox, Jr., *English*
Patricia C. Johnson, *History*
Sterling E. Murray, *Music History*
C. James Trotman, *English*
Richard J. Webster, *History, Coordinator*
Ruth I. Weidner, *Art*

Students are introduced to a broad spectrum of American culture, encouraged to study in depth and to develop career interests through concentrations in American art history, black studies, historic preservation, environmental studies, journalism and editing, and museum studies. An optional internship provides on-the-job experience.

**BACHELOR OF ARTS — AMERICAN STUDIES**

| | |
|---|---|
| 1. General Requirements see pages 30-32 | 51 s.h. |
| 2. Foreign Language/Culture Requirements | 0-15 s.h. |
| 3. Required Core | 23 s.h. |
| ASH 200 | 3 s.h. |
| LIT 200-201 | 6 s.h. |
| HIS 151-152 | 6 s.h |
| ASH 301, 302, or 303 (choose any two) | 6 s.h. |
| ASH 400 or ASH 415, 416 | 3-12 s.h. |
| 4 Elective Core<br>Five American topic courses are to be taken in anthropology, art, government and planning, history, literature, music, philosophy, sociology, with no more than two courses from one discipline. | 15 s.h. |
| 5. Elective Concentration<br>Enough courses to insure that a minimum of 128 s.h. are taken. Each American Studies major must submit for approval a proposed course of study at the beginning of the junior year. For guidance consult the American Studies Program coordinator. | |

**American Studies Minor**

For transcript recognition of an American Studies minor a student must take 18 semester hours in the following areas:

| | |
|---|---|
| American Studies | 6 s.h. |
| American History (preferably HIS 151 or HIS 152) | 3 s.h. |
| American Literature (preferably LIT 200 or LIT 201) | 3 s.h. |
| American topics (One course from the arts, literature, or philosophy. One course from history or social and behavioral sciences, or other courses approved by the advisor.) | 6 s.h |
| | 18 s.h. |

**COURSE DESCRIPTIONS**
AMERICAN STUDIES
Symbol: ASH

**200 American Civilization (3)** An interdisciplinary study of the forces, forms, and values that have contributed to the making of American civilization. Several academic disciplines are drawn upon in exploring the "Americaness" of American institutions, thought, behavior, and material culture.

**301 Material Culture of U.S. I: Art and Images (3)** Colonial period. Interdisciplinary study of the development and expression of American values and identity in both vernacular and elite arts, architecture, and writing.

**302 Material Culture of U.S. II: Art and Images (3)** 19th century. Emphasis on impact of democracy, national expansion and industrialization on architecture, technology, painting, and household furnishings.

**303 Material Culture of U.S. III: Art and Images (3)** 20th century. Impact of secular materialism, democracy, and rapidly changing technology on arts, architecture, planning, and design. American and European interactions will be examined.

**305 American Decorative Arts (3)** Study of decorative and utilitarian objects of the American household environment from Colonial period through World War I.

**400 Senior Thesis or Project (3)** A concluding "statement" incorporating the interdisciplinary generalist approach.

**401 Independent Study (1-3)** An opportunity to pursue alternative outside-the-classroom study projects; field work in community resources, etc.

**415, 416 American Studies Internship I, II (3-6)** Cooperative service-learning experience at community agency, business or institution.

# Anthropology and Sociology

Paul A. Stoller, *Chairperson*

**PROFESSORS:** Becker, Greisman, Samuelson, Stoller Stoller

**ASSOCIATE PROFESSORS:** Luck, Monos, Murphy, Witthoft

**ASSISTANT PROFESSORS:** Cowen

The Department of Anthropology and Sociology offers three programs leading to the Bachelor of Arts degree and, in cooperation with the faculty of teacher education, a program leading to the Bachelor of Science in Education.

1. The B.A. in ANTHROPOLOGY focuses on human biological evolution; on the origin, development and integration of human cultures; and on the interrelationship of biological and cultural factors in the etiology of human behavior.
2. The B.A. in SOCIOLOGY focuses on understanding the processes involved in the creation, maintenance and evolution of social structure, and on the impact of diverse structural forms on individual behavior.
3. The B.A. in ANTHROPOLOGY-SOCIOLOGY focuses on the interdisciplinary study of social anthropology/comparative sociology, drawing upon offerings in both sociology and anthropology to develop an analytic understanding of the dialectic of social structure and culture.
4. The B.S. in EDUCATION in SOCIAL STUDIES is for students interested in pursuing a concentration in anthropology or sociology while earning state certification to teach secondary school social studies.

Majors in the three B.A. programs should consult the appropriate department handbook and their advisor for current requirements. Students planning to major in one of these programs are advised to take ANT 102 and SOC 200 no later than their sophomore year. A grade of at least a B in each of these courses is necessary for admittance. Application for admission is made on forms available from the department office.

Students planning to pursue the B.S. in Education in Social Studies should consult during the freshman year with both their advisor in this department and their professional studies advisor in secondary education.

### REQUIREMENTS COMMON TO THE B.A. PROGRAMS

| | |
|---|---|
| 1. General Requirements, see pages 30-32 | 51 s.h. |
| 2. Foreign Language/Culture Requirement | 0-15 s.h. |
| 3. Limited electives chosen under advisement | 18 s.h. |
| 4. Major Requirements | 60 s.h. |

### BACHELOR OF ARTS — ANTHROPOLOGY

| | |
|---|---|
| 1. Required Core Courses<br>ANT 101, 103, 495 (ANT 102 under social science core) | 9 s.h. |
| 2. Specialization Requirements<br>Four to seven courses in anthropology | 12-21 s.h. |
| 3. Cognate Requirements<br>LIN 230; additional courses outside of anthropology approved by the student's advisor | 15 s.h |
| 4. Free electives | 15-24 s.h. |

### BACHELOR OF ARTS — SOCIOLOGY

| | |
|---|---|
| 1. Required Core Courses<br>SOC 300, 321, 322, 492 | 12 s.h. |
| 2. Specialization Requirements<br>Any six advanced courses in sociology | 18 s.h. |
| 3. Career Preparation Sequence<br>Five non-sociology courses approved by the student's advisor | 15 s.h. |
| 4. Free Electives | 15 s.h. |

### BACHELOR OF ARTS — ANTHROPOLOGY-SOCIOLOGY

| | |
|---|---|
| 1. Anthropology-Sociology Core Courses<br>ANT 341, SOC 302 | 6 s.h. |
| 2. Anthropology<br>Two topical and two area courses in ethnology, selected in consultation with the student's advisor | 12 s.h. |
| 3. Sociology<br>One methodology and three topical (institutional or theoretical) courses, selected in consultation with the student's advisor | 12 s.h. |
| 4. Seminar<br>ANT 490 | 3 s.h. |
| 5. Cognates<br>Four courses selected in consultation with the student's advisor | 12 s.h. |
| 6. Free Electives | 15 s.h |

### BACHELOR OF SCIENCE IN EDUCATION — SOCIAL STUDIES: CONCENTRATION IN ANTHROPOLOGY OR SOCIOLOGY

Students interested in teaching secondary school social studies may pursue a concentration in anthropology or sociology while earning state certification and the Bachelor of Science in Education. See description under SOCIAL STUDIES: B.S. IN EDUCATION, page 113.

### MINOR PROGRAMS

Students may minor in any of the three following programs. A minimum of 18 semester hours is required. Elective courses are selected in consultation with the student's minor advisor. Any one of these minors may be taken as a concentration by students in the Associate of Arts in Liberal Studies Program.

**Anthropology Minor**

| | |
|---|---|
| 1. Required Courses<br>ANT 102, either ANT 101 or 103, and one 400 level course in anthropology | 9 s.h |
| 2. Elective Courses<br>Three other courses in anthropology | 9 s.h. |

**Sociology Minor**

| | |
|---|---|
| 1. Required Courses<br>SOC 200, 300, 322 | 9 s.h. |
| 2. Elective Courses<br>Three other courses in sociology | 9 s.h. |

**Anthropology-Sociology Minor**

| | |
|---|---|
| 1. Required Courses<br>ANT 102, 341 and SOC 200, 341 | 12 s.h |
| 2. Elective Courses<br>Two other 300 or 400 level courses in either anthropology or sociology | 6 s.h. |

## COURSE DESCRIPTIONS

ANTHROPOLOGY
Symbol: ANT

### PRIMARILY FOR FRESHMEN AND SOPHOMORES

**101 Introduction to Anthropology: Biological (3)** Fundamentals of human biology, evolution, and the prehistoric development of culture. Spring, odd years.
***102 Introduction to Anthropology: Cultural (3)** Comparative anaylsis of culture systems Fall, spring, summer.
***103 Introduction to Anthropology: Archaeology (3)** Interpretation of culture through analysis of archaeological remains. Spring, even years Summer
**113 Archaeological Field Techniques (3)** Implementation of archaeological principles and theory in laboratory and field studies. PREREQ OR CONCURRENT: ANT 103. Summer.
**120 Cultures of Ethnic Groups in America (3)** Survey of the cultural history and traditions of ethnic groups in America. Fall, odd years.
**140 Folklore in Society (3)** Survey of basic American folklore genres. Emphasis on folklore as process, tradition, and as an element of culture. Fall, even years.

### FOR SOPHOMORES AND UPPERCLASSMEN

**202 World Ethnology (3)** Survey of the social organization, belief systems, and cultures of selected peoples. PREREQ: ANT 102 or permission of instructor. Spring, even years.
**260 Artifacts and Culture (3) (See also HIS 353).** PREREQ. ANT 102
**280 Practicum in Museum Techniques I (3)** Exploration of techniques of cataloging, conserving objects, and of designing and setting up exhibits Involvement in actual museum work. PREREQ. ANT 102 or premission of instructor. Fall, odd years.

### FOR UPPERCLASSMEN

### A. BIOLOGICAL ANTHROPOLOGY

**310 Human Paleontology (3)** Evolutionary thought, origin and antiquity of the primates; fossil man and living races. PREREQ: ANT 101 (Some background in biology recommended.)

### B. ETHNOLOGY: AREA COURSES

**320 American Indian (3)** Ethnology of North America. PREREQ: ANT 102. Fall, even years. Summer
**321 American Indian Today (3)** Native Americans in contemporary Anglo-America PREREQ ANT 102 or permission of instructor. Spring, odd years. Summer
**322 Ethnology of Central America (3)** Survey of the modern cultures of Central America relationships to ancient peoples; the process of modernization in this area PREREQ: ANT 102.
**326 Cultures and Peoples of Sub Saharan Africa (3)** Examination of the cultures and societies of Black Africa. PREREQ. ANT 102. Spring, even years.
**327 Cultures and Peoples of India (3) (See also HIS 302).** PREREQ ANT 102

★Approved Distributive Requirement Course

**329 Problems in Ethnology (3)** Survey of the ethnographic literature pertaining to specific geographic regions. Area of focus to be announced in advance. PREREQ. ANT 102. Fall, even years.

### C. ETHNOLOGY: TOPICAL COURSES

**341 Social Organization (3)** Study of social groups, their structure and functioning. PREREQ: ANT 102 Spring, odd years
**342 Political Anthropology (3)** Analysis of tribal and peasant political systems. PREREQ: ANT 102. Fall, odd years.
**343 Economic Anthropology (3)** Analysis of tribal and peasant economic systems. PREREQ. ANT 102. Spring, odd years.
**344 Magic, Religion, and Witchcraft (3)** An analysis of supernaturalistic ideology and ritual in both tribal and civil society. PREREQ: ANT 102. Spring, even years. Summer
**345 Culture and Personality (3)** Study of relationship between culture systems and personality. PREREQ. ANT 102. Fall, even years.
**346 Culture Change (3)** Empirical and theoretical study of culture change. PREREQ ANT 102. Fall, even years.
**350 Primitive Art (3) (See also ARH 350).** PREREQ. ANT 102.

### D. ARCHAEOLOGY

**360 Historical Archaeology (3)** Historical research through archaeology. Chester County is emphasized through local research projects. PREREQ OR CONCURRENT: ANT 103. Summer
**362 Archaeology of Central America (3)** The archaeological record of Central America, covering the significant features of each culture area from modern Mexico to Panama PREREQ. ANT 103

### ADVANCED AND SENIOR COURSES

**380 Language and Culture (3) (also LIN 380)** See LIN 380.
**381 Sociolinguistics (3) (also LIN 381)** The study of the use of language in society and in educational settings; social dialects; language policy; Black English. PREREQ. ANT 102. Spring.
**383 Structuralism: From Chaos to Order in the World of Ideas (3)** This course is a general survey of structuralist theory as it relates to linguistics, anthropology, psychology and literature. The goal of the course is to demonstrate how structuralism is a theoretical orientation in the social sciences and the humanities that attempts to transform the chaos of appearances into order of reality in the world of ideas.
**405 Topical Seminar in Anthropology (3)** Selected topics in the subdisciplines of anthropology Topics announced in advance. Juniors and seniors only. Spring.
**410 Independent Studies in Anthropology (1 to 3)** Special research projects, reports, readings in anthropology Juniors and seniors only PREREQ: Permission of department chairperson. Fall, spring, summer
**459 History of Ethnological Theory (3)** Development of ethnological theory with emphasis on the nature of explanation in ethnology. PREREQ: Six hours in ethnology and junior or senior standing. Fall
**490 Seminar in Social Anthropology (3)** History and theory of social anthropology. PREREQ: Six hours in ethnology and six hours in sociology. Seniors only. Spring.
**495 Senior Seminar in Anthropology (3)** Discussion and supervised research designed to integrate conceptual and methodological skills. The research paper for the seminar must be acceptable as a required departmental senior research paper. Senior anthropology majors only. Fall.

SOCIOLOGY
Symbol: SOC

### PRIMARILY FOR FRESHMEN AND SOPHOMORES

***200 Introduction to Sociology (3)** Fundamentals of the sociological perspective on human behavior Fall, spring, summer.
***240 Sociology of the Family (3)** Comparative, historical, and cross-cultural analysis of the family institution. Fall, spring, summer.
**250 Social Problems (3)** Analysis of current social disorders; urban unrest, racial tension, poverty, addictions, crime, and mental illness. Fall, summer.

### PRIMARILY FOR SOCIOLOGY MAJORS AND OTHER UPPERCLASSMEN

**300 Sociological Theory (3)** Historical development of the sociological perspective on human behavior, emphasis on the perennial issues in sociological explanation. PREREQ: SOC 200, Fall
**302 Sociology of Everyday Life (3)** How people interact in everyday settings examined from the dramaturgical perspectives of Goffman, Douglas, Burke, and others. PREREQ. SOC 200. Spring, summer
**321 Statistics in Sociological Research (3)** The application of statistical methods to sociological hypothesis testing PREREQ: SOC 200. Spring.
**322 Methods of Sociological Research (3)** The logic of social research Fundamentals of research design, data collection and reduction, and non-statistical analysis. PREREQ: SOC 200. Spring.
**333 Self and Society (3)** A symbolic interactionist perspective on social psychology which focuses on the self in social interaction. PREREQ. SOC 200 Fall.
**335 Racial and Cultural Minorities (3)** Analysis of the implications of racial differences, the factors affecting prejudice and discrimination, and structural aspects of group conflicts. PREREQ: SOC 200. Spring.
**341 Social Inequality (3)** Analysis of inequalities in wealth, power, and prestige in contemporary societies. PREREQ SOC 200. Odd years.
**342 Urban Sociology (3)** A descriptive study of the form and development of the urban community with respect to demographic structure, spatial and temporal patterns, and functional organization. PREREQ. SOC 200. Fall
**343 Sociology of Organizations (3)** Analysis of large-scale formal organizations with emphasis on bureaucracy as the dominant form of social organization in the West. PREREQ. SOC 200. Spring
**344 Sociology of Religion (3)** Theoretical analysis of social functions of religion; history and internal structure of religious institutions; their relationship to other institutions. PREREQ: SOC 200. Fall, odd years.
**345 Sociology of Education (3)** Sociological

dimensions of educational institutions. PREREQ: SOC 200. Fall.

**346 Sociology of Sex Roles (3)** Analysis and evaluation of sociological research on sex roles. PREREQ: SOC 200.

**349 Perspectives on Mental Illness (3)** An interdisciplinary examination of mental illness from the perspectives of sociology, psychology, and the arts. PREREQ: SOC 200.

**350 Sociology of Mental Illness (3)** A sociological perspective on mental illness; its definition, etiology and treatment. PREREQ: SOC 200.

**351 Deviance (3)** Causes and consequences of the construction and violation of social norms. PREREQ: SOC 200. Fall.

**352 Criminology (3)** Sociological analysis of the definition, distribution, and causes of crime, and of social response to it. PREREQ. SOC 200. Fall, spring, summer.

**353 Juvenile Delinquency (3)** Theories of delinquency; evaluation of programs for its prevention and control. PREREQ. SOC 200. Spring, summer.

**360 Sociology of Culture (3)** Analysis of the major social movements that have shaped the character and future of modern man PREREQ SOC 200.

**361 Sociology of Medicine (3)** A sociological perspective on health, illness and medical care PREREQ SOC 200.

**362 Sexuality in Society (3)** The social dimensions of human sexuality. PREREQ: SOC 200. Spring, odd years. Summer

**364 Sociology of Aging (3)** An examination of the problems, adaptations and contributions of the aging population. PREREQ: SOC 200.

**369 Social Movements (3)** An introduction to the study of social movements both historical and contemporary. PREREQ SOC 200.

**371 Applied Social Change (3)** Strategy and tactics of planning and guiding change in small and large-scale social systems. PREREQ: SOC 200. Spring.

**376 Sociology of War and Peace (3)** Exploration of the relationship between social structure and war PREREQ: SOC 200. Spring

**377 Clinical Sociology (3)** Analysis and evaluation of therapeutic applications of sociology in group and individual settings. PREREQ SOC 200. Fall.

**401 Social Change (3)** Critique of the leading models of social order and change; analysis of major transformation in Western civilization. PREREQ: SOC 200. Fall.

**402 Career Internship in Sociology (6)** Field experience in agencies involved in social change. PREREQ SOC 371, or permission of the instructor.

**410 Issues in Sociological Thought (3)** Analysis of several of the key philosophic issues underlying sociological thought. PREREQ. SOC 300, or permission of the instructor Fall.

**490 Independent Studies in Sociology (1 to 3)** Individual research projects, reports, and/or readings. Seniors only. PREREQ: permission of department chairperson Fall, spring, summer

**491 Topical Seminar in Sociology (3)** Special topics in theory or methodology. Topics announced in advance. Admission by permission of instructor. Juniors and seniors only.

**492 Senior Seminar in Sociology (3)** Preparation of senior research paper Senior sociology major only. Fall.

# Art

Linwood J. White, *Chairperson*

**PROFESSOR:** Hemphill

**ASSOCIATE PROFESSORS:** Lasuchin, Sermas, Simmendinger, Weidner, White

**ASSISTANT PROFESSORS:** Blake, Defino, Rarick, Shapiro

**INSTRUCTOR:** Baker

The undergraduate programs offered by the Department of Art give students the opportunity to achieve competence in studio art, theory, and history of art taking into consideration both personal and vocational needs. Each student's advising reflects an effort to relate the general requirements to art subjects.

In addition to the formal programs listed below, alternative courses of study may be planned in conjunction with other departments. Students are encouraged to make connections between art and other subjects where appropriate to achieve vocational and personal advancement after consultation with the student's advisor.

**BACHELOR OF ARTS — ART**

1. General Requirements (see pages 30-32) 51 s.h.
2. Language Requirement (see special note below) 0-15 s.h
3. Art Department Program Requirements (select one track)
   - A. Studio Art I sequence — (prepares student for graduate study and/or personal/vocational competence)
     - (1) Studio Foundation — (ART 106, 111, 112, 206, 220, 221) 18 s.h.
     - (2) Art History, under advisement 12 s.h.
     - (3) Other Studio — (elect from studio offerings) 36 s.h
     - (4) Senior show required

     ART TOTAL 66 s.h.
   - B. Studio Art II sequence — (provides a basic concentration with the option of a second, pre-professional concentration.)
     - (1) Studio Foundation — (ART 106, 111, 220) 9 s.h.
     - (2) Art History, under advisement 12 s.h.
     - (3) Other Studio — (elect from studio offerings. See special note below) 15 s.h.
     - (4) Pre-professional concentration-courses to be selected from another discipline (Elementary Education, Special Education, Business, Foreign Area Studies or others under advisement.) 27 s h.
     - (5) Senior show required

     ART TOTAL 63 s.h.
   - C. Art History — (preparation for graduate study in art history or museum study)
     - (1) Art History Foundation — (ARH 350, 381, 382, 383, 384, 385, 386) 21 s.h.
     - (2) Studio Foundation — (ART 106, 111, 220) 9 s.h.
     - (3) Other Art History, museum or other courses relevant to the student's concentration and interests under advisement. 6 s h.
     - (4) Senior project required

     ART TOTAL 36 s.h.

Internships are also available in certain areas such as museums, historical societies, or institutions where art therapy or other art services may be required. A graphics internship is available.

*Special Note:*
Foreign language requirement for Studio I is two semesters with 3

foreign area study courses. For Studio II and Art History the requirement is to meet the level of intermediate II, 202.

Studio majors are advised to consider concentration emphasis in general categories of 2-dimensional, 3-dimensional, or inter-media, or, if the subject area permits, more specialized concentration in single or limited media.

**BACHELOR OF FINE ARTS — STUDIO ARTS** — The Bachelor of Fine Arts is regarded as the initial professional degree in art by the National Association of Schools of Art. Its primary emphasis is upon the development of skills, concepts, and sensitivities important to the professional artist. Concentration in a major professional area begins only upon the satisfactory completion of the foundation requirements and the approval of the faculty advisor.

1. General Requirement (see pp. 30-32) 51 s.h.
2. Art Department Program Requirements*
   - A. Foundation Requirements
     - (1) Studio Art (ART 106, 111, 112, 206, 216, 217, 220, 221, 222, and 211 or 241, and 231 or 347) 30 s.h.
     - (2) Art History (ARH 103, 104 and two courses under advisement) 12 s.h.
   - B. Professional Specializations 24 s.h.
     Professional specialization begins in the junior year when the student selects and has been accepted in one of the following areas:
     - (1) Drawing and Painting (ART 226, 227, 245, 306, 307, 316, 317, 320)
     - (2) Graphic Design (ART 211, 212, 310, 311, 312, 490, 491, 499)
     - (3) Printmaking (ART 241, 242, 243, 244, 341, 342, 343, 344)
     - (4) Sculpture and Crafts (A selection of eight courses from ART 231, 232, 266, 321, 322, 325, 331, 332, 335, 347, 348, 409)
     - (5) General Studio 24 s.h. of approved courses.
   - C. Art Electives (to be selected with advisement) 18 s.h.

   TOTAL ART 84 s.h.

*Student must maintain a grade of C in all major subjects.

**MINOR IN STUDIO ART**

I. The student must complete the required courses: Art 106 (Beginning Drawing), Art 111 (Basic Design, 2-D), Art 220 (Basic Design, 3-D) (9 s.h.)

II. The student, under advisement, may select a minor specialization so that the emphasis is upon *one* of these groups: drawing and painting, graphic design, printmaking, sculpture, or crafts (9 s.h.)

Total (18 s.h.)

**MINOR IN ART HISTORY**

This program provides alternative tracks to satisfy a variety of emphases to which art history may be applied. These include both vocational and liberal arts interests which range from a highly structured sequence to a self-designed sequence.

A. *Art History Survey*—Structured sequence of courses designed to provide an in-depth comprehensive core of Western art development. Recommended as an important cultural component to the study of history, literature, performing arts, anthropology, sociology, and psychology. Majors in any of these disciplines will be provided a bibliography that relates art to their particular subject field of interest.

ARH 350, 381, 382, 383, 384, 385, 386 . . . . . 18 hrs.

B. *Art History and its Interfaces* — According to interest or possible vocational application, provides an opportunity to explore either the various historical periods/styles of art or the interfaces of art history with studio art, American studies, and other cognate areas.

1. ARH 103, 104 (ARH 350-383 can be substituted for 103 and ARH 384-386 can be substituted for 104) 6 s.h.
2. Under advisement, any two (2) other art history courses 6 s.h.
3. Under advisement — 6 s.h.
   - a. any two studio courses
   - b. any two American studies courses
   - c. any two other art history courses
   - d. any two cognate courses from other disciplines
   - e. any combination of the above 18 s.h.

Either of these minors may be used as the area of concentration by students in the Associate of Arts in liberal studies degree program.

**COURSE DESCRIPTIONS**

ART

Symbol: ART

**105 Art Workshop (3)** An art workshop for non-art majors. Exploration of art materials and techniques.

**106 Beginning Drawing (3)** Drawing from direct observation and an introduction to ideas of perception and interpretation. Use of a variety of media

**111 Basic Design (2-D Design) (3)** Experimentation with shape, space, light, color, texture in a variety of media toward developing a visual vocabulary.

**112 Color and Design (2-D Design) (3)** Extensive study of color theory and its application to a variety of fine and industrial art projects.

**206 Intermediate Drawing (3)** Work in a variety of media and methods designed to develop "aggressive seeing." Emphasis on the exploration of line as boundary to describe form and space, as gesture, as calligraphy, and for expressive qualities as a tool for working in other media PREREQ ART 106.

**211 Graphic Design I: Lettering and Layout (3)** Exploration of design principles through use of lettering and typographic forms as source material for solving problems in communication of ideas. Practical approach to use of drafting tools and graphic materials, basic pasteup procedures Color separation and over-printing methods, preparation of mechanicals for production purpose, means of reproduction.

**212 Graphic Design II: Graphic Concepts (3)** Continuation of ART 211 with emphasis on expressive possibilities of lettering and typography. Further study of production methods and use of silk-screen techniques as means of reproduction PREREQ ART 211, 242, or permission of instructor

**216 Beginning Painting (3)** An introduction to the basic materials and techniques of the painter with emphasis on color.

**217 Intermediate Painting (3)** The course seeks to provide a workshop atmosphere in which the student is given the opportunity to explore the potential of the painting media Use of standard materials of paint, brushes, and canvas is required.

**220 Fundamentals of 3-Dimensional Design (3)** An introduction to theories, processes, and elements of perception and visual design in a three-dimensional situation Problems will be geared to problem solving rather than object-making.

**221 Advanced 3-Dimensional Design (3)** Experimentation with various materials toward solving problems in terms of visual elements as they relate to volumetric forms in space.

**222 Beginning Sculpture (3)** An introduction to the basic fundamentals of sculpture, including concepts of design, knowledge of tools and techniques, materials and processes. Project assignments to be rendered in clay, plaster, wood, and stone.

**226 Water Color I (3)** An introduction to the basic tools and techniques of the water-color painter Emphasis upon transparent water color

**227 Water Color II (3)** Advanced problems in water color, gouache, tempera, and mixed media

**231 Ceramics I: Basic Techniques (3)** Introduction to the basic techniques of ceramics. Hand and wheel methods of construction; knowledge of clay bodies, firing, and glazing.

**232 Ceramics II: Intermediate Techniques (3)** Fundamental methods of creating clay forms on the wheel. Experimentation with clay bodies, glazes, and the operation of the kiln. Design is stressed

**241 Printmaking: Introduction of Relief Printmaking (3)** An introduction to the medium of print-making: linoleum cuts, woodcuts, and color-graphs.

**242 Printmaking: Introduction to Silk-Screen Printmaking (3)** An exploration of the basic techniques of silk-screen printing. Emphasis upon color and design

**243 Printmaking: Intermediate Relief Printmaking (3)** Continuation of ART 241 emphasizing expressive possible techniques and their combination with other print media. PREREQ. ART 241, or permission of instructor

**244 Printmaking: Intermediate Silk-Screen Printmaking (3)** Continuation of ART 242 empha-

sizing expressive possibilities of various silk-screen techniques and their combination with other print media PREREQ: ART 242, or permission of instructor

**245 Architectural Drawing (3)** Studio experiences in layout, preparation of plans and elevations, presentations (renderings), and architectural lettering. Use of mechanical drawing tools to help students express steps that occur from design to realization of a structure.

**251 Art in the Elementary School (3)** Workshop and seminar providing experience with a wide variety of media appropriate for use with children as well as investigation into the philosophy and psychology of children's art

**263 Art as Therapy (3)** Exploration of potentials of art activity chosen for their therapeutic value in work with physically or emotionally handicapped in either educational or therapeutic milieu.

**266 Introduction to Crafts (3)** An introduction to varied materials with an emphasis on craft and design as a form of expression. Applicable to teaching and recreation use. Media to include clay, fibers, glass and metals.

**306 Drawing III: Life Drawing (3)** An exploration of the abstract dynamics of figure drawing with particular application of anatomical structure to expressive design. PREREQ: ART 106, 206.

**307 Drawing IV (3)** Individualized instruction in increasingly complex formal and expressive problems in drawing.

**310 Graphic Design: Trademark and Logotype (3)** Experimentation with designing trademark and logotype symbols in single and multi-pattern images as applied to a variety of advertising media for private and public agencies. PREREQ: ART 211, 242, or permission of instructor

**311 Graphic Design: Independent Project (3)** Individualized instruction in design problems at an advanced level.

**312 Graphic Design IV: 3-D Graphics (3)** Problems in advanced design; the application of previous studies in design to specific projects. PREREQ: ART 211, 242, or permission of instructor.

**316 Advanced Painting (3)** Emphasis upon advanced problems in painting in a variety of techniques encouraging individual expression

**317 Painting: Studio Problems (3)** Concentration upon individual work and professional competence. Group critiques and discussions.

**318 Painting from Landscape: Independent Project (3)** Individualized landscape painting course requiring the student to paint on location in the Delaware Valley.

**319 Painting From Masters: Independent Project (3)** Introduce to the student artist techniques and styles by painting from master works.

**320 Painting: Independent Projects (3)** The development of a personal style is explored through a theme and its variation. Discipline and self-criticism are realized through a series of critiques and evaluations

**321 Intermediate Sculpture (3)** More advanced problems in sculpture with emphasis on individual exploration of form, structure, and process. Independent project to be rendered in choice of materials to include clay, plaster, wood, and stone.

**322 Advanced Scuplture (3)** Continued exploration and development of individual form and process awareness through involvement with modeling, casting, fabrication, and assemblages. In addition to clay, wood, stone, and plaster, metals and plastics will be utilized

**323 Abstract Painting (3)** A studio exploration of the fundamental principles of abstract painting.

**325 Sculpture: Independent Projects (3)** Individualized instruction in advanced sculpture. Preparation for senior show.

**331 Ceramics III: Advanced Techniques (3)** An advanced course to develop craftsmanship and to explore clay as a means of individual expression

**332 Ceramics: Studio Problems (3)** Work at an advanced level in specialized ceramic techniques.

**335 Ceramics: Independent Projects (3)** Individualized instruction as well as research and study in ceramic design.

**341 Printmaking: Introduction to Intaglio Printmaking (3)** Intaglio techniques, etching, dry point, acquatint, and engraving.

**342 Printmaking: Introduction to Lithography (3)** Fundamentals of stone and plate lithography.

**343 Printmaking: Intermediate Etching (3)** Continuation of 341 with emphasis on expressive qualities of the medium and its possible combination with other print media PREREQ: ART 341, or permission of instructor

**344 Printmaking: Intermediate Lithography (3)** Continuation of ART 342 with emphasis on expressive qualities of the medium and its possible combination with other print media PREREQ: ART 342, or permission of instructor.

**345 Printmaking: Independent Projects (3)** Individualized instruction in depth in a selected printmaking medium.

**347 Crafts: Weaving I (3)** Basic techniques of weaving are explored with emphasis upon fabric design and craftsmanship.

**348 Crafts: Weaving II (3)** Provides opportunity for the weaver to further explore and develop skills as a designer. Emphasis is placed on the interrelationship between functional materials and design processes.

**349 Crafts: Weaving III (3)** To resolve advanced weaving problems in project of an individual, creative nature leading to practical application.

**359 Resources in Art Education (3)** The use of cultural and community resources in the schools with an emphasis on the teaching of art appreciation.

**409 Weaving: Independent Projects (3)** Individualized instruction and project assignments.

**410 Independent Study (3)** The opportunity for a student to work on an individual studio problem. Only to be taken under advisement and according to departmental policies

**455 Introduction to Multi-Media (3)** A workshop for students with background in the studio arts. To be taken under advisement.

**490 Graphic Design V (3)** To resolve visual communication problems of diverse nature by graphic means, using elements of typography, symbols, and pictorial images, including photography PREREQ: ART 211, 212, 310, 312, or by special permission of instructor

**491 Graphic Design VI (3)** Continuation of studies outlined in Graphic Design V. Finishing project(s) bringing it to a state of completion — printed art samples, utilizing photo-silkscreen method of reproduction PREREQ: ART 211, 212, 310, 312, and 490, or by special permission of instructor

**499 Graphic Design: Independent Project (3)** An advanced study of an independent nature to compile a portfolio in graphic designs and prints for professional employment or continuation of studies on the graduate level

## ART HISTORY

Symbol: ARH

**101 Learning to Look: Fine Arts, Art (3)** An appreciation course covering various art forms of twentieth century emphasis on selected historical antecedents.

**102 Survey of Art History (3)** A general introduction to the history of western art from the earliest cave paintings to the twentieth century.

**103 Art History I: Prehistory through Medieval (3)** Survey of significant art and architectural monuments from prehistory through Middle Ages.

**104 Art History II: Renaissance through Modern (3)** Continuation of ART 103 from Renaissance through twentieth century.

**350 Primitive Art (Also ANT 350) (3)** Analysis of primitive art as determined through ritual and myth. Focus includes ethnographic parallels to prehistory and the concept of primitivism in the West.

**360 Function of the Museum in Art (3)** Role and function of the museum as an educational and cultural institution. Main focus on field trips to local museums in Chester and Delaware Counties and Wilmington, Delaware area.

**361 Museum Practice (3)** Field experience in a particular museum facility in the West Chester, Wilmington, Philadelphia area. PREREQ: ARH 360.

**381 Near Eastern Art: Ancient Antiquity (3)** The art and architecture of Ancient Egypt, Mesopotamia, Assyria, and Babylonia from 3000–500 B.C.

**382 Art of Classical Antiquity (3)** The art and architecture of the Greeks, Etruscans, and Romans.

**383 Art of Middle Ages (3)** The art and architecture of the European medieval world and their development from Early Christian and Romanesque art into the full flowering of the Gothic period

**384 Art of Renaissance-Baroque (3)** Study of the art forms of the 15th through 17th century in Europe as they affected social and religious cross currents and the rise of the role of the artist in society.

**385 The Romantic Rebellion (3)** From David to Rodin: the rise and development of the romantic style and its struggle with orthodox classicism.

**386 Modern Art Seminar (3)** Analysis of major styles of 20th century art from Picasso to Painterly Realism. Particular emphasis will be placed on topics in American art developed in the New York school from 1950 to the present

**387 Modern Masters (3)** An independent research project on a major twentieth century visual artist.

**400 Art Seminar (3)** Special topics to be announced for studio and art history. Offered periodically as appropriate. PREREQ: Permission from the instructor

**405 Russian Art (3)** A history of the art and architecture of Russia from Medieval beginnings through social realism to socialist realism.

**411 Latin-American Art (3)** An analysis of the impact of Renaissance-Baroque forms and Counter-Reformation theology on native traditions and expressions in the new world

**413 American Art (3)** A survey of American paintings and sculpture from Colonial times to the present

**414 Research and Methodology in Art (3)** Introduction to basic research methods and the use of reference material relevant to the study of art history

**415 Art History: Independent Study (3)** Opportunity for the student to pursue a particular field of interest.
**416 American Architecture: Colonial and Early Republic (3)** An introduction to the heritage of our early American architecture. These buildings reveal tangible evidence of the life of the early colonial period and of the republic. The influence of the traditional coupled with modifications because of climate, materials, and labor reflect both provincialism and independence.
**417 Modern American Architecture (3)** Study of architectural forms and styles in America since the early 19th century, including a thorough analysis and consequent appreciation and understanding of the social, stylistic, and technological sources for our 19th- and 20th-century built environment.
**419 Women in Art: Madonna or Model? (3)** Traces the position of women artists in society and its effects on their work. What role have women played as the subject of painting through the ages? What are women artists creating today?
**420 European Architecture (3)** Survey of European architecture from the Norman Conquest to the 20th century.
**421 Modern Architecture (3)** Traces the technological sources of modern architecture from its roots in the nineteenth century through to the late twentieth century. Includes such influences as the Chicago School, the late Californians, and the Bauhaus, leading to new concepts of space, decoration and use of materials
**485 Classical Archaeology (3)** A study of Greek, Etruscan, and Roman Archaeology. Theories of archaeology are given practical application in the field. The discovery, preservation, and analysis of finds from the classical world are studied.

# Biology

## (See also Pre-Medical Program)

Jack Waber, *Chairperson*
**PROFESSORS:** Cinquina, Romig, Waber, Woodruff
**ASSOCIATE PROFESSORS:** Bernhardt, Brown, Cullen, Eleuterio, Fish
**ASSISTANT PROFESSORS:** Beneski, Fairchild, Knabb, Mbuy, Potvin, Triano
**ADJUNCT PROFESSORS:** White, McLean

The major in biology centers about a core of courses which emphasize broad unifying principles. The foundation subjects (general biology, general botany, and general zoology) are followed by the integrative disciplines of genetics, ecology, and physiology. Available electives provide enriching experiences in many areas of biology.

The Department of Biology offers six undergraduate degree programs:

1. The B.S. in BIOLOGY can be individually tailored to provide the skills that students need to achieve their career goals. This program also provides the basic preparation needed for entry into graduate or professional schools.
2. The B.S. in BIOLOGY — CHEMISTRY offers the student a strong background in both biology and chemistry. Then emphasis on lab-oriented courses prepares the student to pursue a career in laboratory research in biochemistry and molecular biology at industrial, medical, academic, and government facilities. This program also prepares the student for admission to graduate and professional schools.
3. The B.S. in BIOLOGY: CLINICAL MICROBIOLOGY prepares students for careers in clinical and research laboratories, industrial and academic research, and government service in the areas of bacteriology, immunology, virology, mycology, and parasitology. The program provides extensive laboratory experience with the techniques that are most useful and important to modern microbiological science. This program also provides the basic preparation needed for entry into graduate or professional schools.
4. The B.S. in BIOLOGY: ECOLOGY provides an opportunity for interested students to obtain a strong background in field biology and ecology. The required core curriculum and concentration electives provide opportunities for later careers as biologists in state and federal environmental agencies, industry, environmental consulting firms and similar organizations. Internships are strongly recommended as part of the program. Coursework emphasizes skills obtained in biology, chemistry and mathematics. Additional coursework from other departments may be recommended to fulfill particular career objectives.
5. The B.S. in EDUCATION: BIOLOGY is a program designed to prepare the student for a career in teaching in secondary schools. Professional certification in biology is awarded to the student who completes the program satisfactorily. Students are strongly advised to seek certification in a related area to enhance employment potential. Such related areas include: general science, health, education, athletic training, and environmental education
6. The B.A. in BIOLOGY provides the liberal education and the special preparation required for careers in university teaching, government service, independent and industrial research, science-related sales and public relations, and other areas of business. This program also prepares students for admission to graduate and professional schools.

**REQUIREMENTS COMMON TO THE B.S. PROGRAMS**

| | |
|---|---|
| 1. General Requirements | 51 s.h. |
| 2. Biology Requirements<br>BIO 110*, 330, 490 | 9 s.h. |
| 3. Other Science Requirements<br>CHE 103-104, 231-232, 321; CRL 103-104, 232, 321; PHY 130-140 | 32 s.h. |
| 4. Mathematics Requirements<br>Mat 121, 161; MTL 121; CSC 115 | 11 s.h. |

**B.S. IN BIOLOGY — CHEMISTRY**

| | |
|---|---|
| 1. Required Chemistry Courses<br>CHE 345, 471, CRL 471, CHE 491** | 9 s.h. |
| 2. Biology Electives<br>(BIO 214 and BIL 215, 370, 448) | 3-5 s.h. |
| 3. Concentration Electives<br>Selected from upper division courses in biology and/or chemistry | 14 s.h. |

**B.S. IN BIOLOGY: CLINICAL MICROBIOLOGY**

| | |
|---|---|
| 1. Required Biology Courses<br>BIO 115* or 117*, 214, 314, 452, 454, 456, 464, 465; BIL 215 | 28 s.h. |

* BIO 110, 115 and 117 must be passed with a grade of "C" (2.0) or better
**CHE 491 may be substituted for BIO 490.

2. Biology Electives 9 s.h.
Selected under advisement

**B.S. IN BIOLOGY — ECOLOGY**

1. Required Biology Courses 21-22 s.h.
BIO 115*, 117*, 370, 411, 466 or 468, 470
2. Biology Electives 12-13 s.h.
Selected under advisement from
BIO 275, 277, 372, 377, 475, 476, and 485

**B.S. IN EDUCATION — BIOLOGY**

1. Required Biology Courses 20 s.h.
BIO 115*, 117*, 150, 466 or 468, 370, SCB 350
2. Biology Electives 6 s.h.
Selected from upper division courses
3. Required Education Courses 27 s.h.

**B.A. IN BIOLOGY**

1. Required Biology Courses 15-16 s.h.
BIO 115*, 117*, 466 or 468, 421
2. Biology Electives 8 s.h.
Selected under advisement

* BIO 110, 115 and 117 must be passed with a grade of "C" (2.0) or better.

**CHE 491 may be substituted for BIO 490.

**MINOR IN BIOLOGY**

Baccalaureate students may receive transcipt recognition for a minor area of study in biology by taking courses in general biology or by combining general biology with an emphasis on zoology or botany.

Minor requirements:

1. BIO 110, General Biology
2. BIO 115, Botany and/or BIO 117, Zoology
3. Additional biology courses under requirement to complete a minimum of 17 credits and 5 courses.

**ADVANCED PLACEMENT POLICY**

A score of three (3) on the Biology Advanced Placement Exam of the College Boards will allow a biology or chemistry-biology major to begin his or her studies without having taken BIO 110, General Biology. Students who are granted advanced placement in biology take an additional three (3) hours of electives in biology.

## COURSE DESCRIPTIONS

### BIOLOGY

Symbol: BIO unless otherwise shown
(3-2) represents 3 hours lecture and 2 hours lab.

***100 Basic Biological Science (3)** Basic principles of biology. Cell theory, energy metabolism, genetics, development, diversity of life forms, and ecology. Not open to biology majors. (2-2)

**102 Humans and the Environment (3)** The effects of human population on earth's resources are studied against a background of physical, biological, and health sciences.

***110 General Biology (4)** The concepts general to all living organisms such as cell structure and function, genetics, evolution, and ecology. (3-3)

**115 General Botany (4)** A survey of plant and plantlike organisms from bacteria to and including the angiosperms with emphasis on anatomy, physiology, reproduction, and economic importance (3-3) PREREQ. BIO 110.

**117 General Zoology (4)** Principles of animal biology Form and function of vertebrate and invertebrate animal types (3-3) PREREQ BIO 110.

**150 Contemporary Issues in Biology Teaching (1)** Secondary science curriculum, professional organizations, academic preparation of science teachers. (1-1) May not be taken as a biology major elective.

**172 Field Ecology and Natural History (3)** Class and field work in natural history and ecology Identification of local organisms and pertinent ecological concepts. Not counted toward a biology major (2-3) PREREQ. permission of department.

**203 Current Issues in Ecology (3)** A course for non-majors dealing with the underlying ecological bases for current issues taken from the popular media during the semester in question. May not be taken as a biology major elective.

**209 Human Anatomy (4)** The organ systems of man with emphasis on gross structure. Occasional reference to microscopic structure, development, function, and pathology Laboratory work deals with the human skeleton and dissection of the preserved cat. (3-2) May not be taken as a biology major elective.

**214 Introductory Microbiology (3)** The biology of medically important microorganisms, their structure, taxonomy, physiology, control and host-parasite interactions. PREREQ BIO 100 plus one semester of chemistry. To be taken with either BIL 214 or BIL 215.

**BIL 214 Introductory Microbiology Laboratory (1)** Laboratory experiences using aseptic techniques and demonstrations with application to patient care and public health. To be taken with BIO 214 Not open to science majors.

**BIL 215 Experiments in Microbiology (2)** Microbiology laboratory skills including aseptic techniques, slide preparation, maintenance of stock cultures, principles of identification and media preparation. To be taken with BIO 214 Open only to science majors.

**275 Field Botany (3)** Methods of studying plants in their natural surroundings Use of keys, botanical manuals, and illustrated floras to identify living specimens. (2-3) PREREQ: BIO 100 or 115

**277 Vertebrate Ecology (3)** Animal life in the surrounding localities Identification, behavior, habitats, feeding, and reproduction. (2-3) PREREQ BIO 100 or 117. Offered in fall of even years.

**307 Pathophysiology (3)** An integrated study of the processes involved in the total body systemic complex as it changes from the ordered homeostatic condition to the imbalanced diseased state. The use of disease models, with clinical considerations, strengthens the concepts (4) PREREQ BIO 209, 309 Offered in fall. May not be taken as a biology major elective

**309 Human Physiology (4)** Basic human functions with emphasis on the circulatory, respiratory, and nervous systems. (3-2) May not be taken as a biology major elective

**314 Diagnostic Bacteriology (3)** Systematic study of pathogenic bacteria with extensive laboratory experience in handling and identifying these organisms. (3-3) PREREQ: BIO 214, BIL 215.

**330 Genetics (4)** Nature of genetic material; its qualitative and quantitative variation; recombination, interaction of gene products; regulation of genetic material; its role in evolution. (3-2) PREREQ: BIO 110, CHE 232, MAT 105 or equivalent.

**357 Comparative Vertebrate Anatomy (4)** Comparative study of the principal organ systems of vertebrates as to their structure, function, and evolutionary relationships. (2-4) PREREQ: BIO 117. Offered in fall.

**370 Ecology (4)** Relationship between living things and their environment approached through the study of individual ecosystems. (3-3) PREREQ. 8 hours of biology or permission of instructor

**372 Freshwater Flora and Fauna (3)** A laboratory and field oriented course in the identification and ecology of freshwater algae and invertebrates (1-4) PREREQ BIO 115, 117. Offered in fall of odd years

**377 Entomology (3)** Insects: their structure, function, classification, economic importance, and biological significance. (2-3) PREREQ BIO 110 or 117 Offered every other year.

**409 Internship in Biological Sciences (3-16)** A one semester work study appointment with a commercial, industrial or governmental agency Students will be supervised jointly by the professional scientist of the agency and a faculty member of the Biology Department A maximum of eight internship credits may be applied toward biology elective credit. PREREQ: Senior standing and approval of the department chairperson.

**411 Biometrics (3)** The experimental design and

*Approved distributive requirement course

computer-assisted statistical analysis of biological research problems. (2-3) PREREQ: BIO 110, MAT 121, MTL 121.

**421 Cellular and Molecular Biology (4)** A lecture and laboratory course that studies the molecular basis of cellular life. Eukaryotic cell structure and function will be emphasized (3-3) PREREQ: BIO 110, BIO 115 or 117, BIO 468, CHE 103, 104, 231, 232, 321, CRL 103, 104, 231, 232, 321; MAT 121, 161

**428 Animal Histology (3)** A study of the microscopic structure and function of vertebrate tissues and organs. (2-2) PREREQ. BIO 110, 117 or consent of the instructor. Offered in fall.

**429 Microtechnique (2)** An introduction to histological and histochemical laboratory techniques. (4) PREREQ. BIO 428 or consent of instructor.

**430-439 Course Topics in Biology (1-3)** Courses in this series are of timely interest to the student. Topics may include biological terminology, laboratory techniques, mycology, etc. Open only to junior and senior science majors.

**448 Animal Development (4)** Introduction to principles of animal development with laboratory study of vertebrate embryos. (3-3) PREREQ: BIO 110, 330. Offered in spring.

**452 Parasitology (3)** Biology of the principal types of animal parasites. PREREQ: BIO 117.

**454 Mycology (3)** An introductory course including a general study of the biology of fungi and a survey of the field of medical mycology. (3) PREREQ: BIO 110 plus 4 hrs. of biology.

**456 Virology (3)** Molecular biology of bacterial, plant, and animal viruses, virus classification, ultrastructure, mechanicisms of replication and effects of virus infection on host cell. PREREQ. One year of organic chemistry, BIO 330.

**464 Microbial Physiology (3)** Physiology and biochemical variations seen in prokaryotes and lower eukaryotes. (2-4) PREREQ: BIO 214, 330, and CHE 232.

**465 Immunology (4)** Immunoglobulin structure and function, nature of antigens, cell-mediated immunity, hypersensitivity, regulation of immunity, immunological diseases Laboratory experience in immunological techniques. (3-3) PREREQ: CHE 232.

**466 Plant Physiology (3)** Physiological processes of plants. Photosynthesis, respiration, intermediary metabolism, entrance of solutes into the plant, water metabolism and growth regulators. (2-3) PREREQ. BIO 115, CHE 231

**468 General Animal Physiology (4)** General theoretical and applied principles of the physiology of various animal cells, tissues, and organs with an emphasis on homeostasis and mammalian physiology. (3-3) PREREQ. CHE 232, MAT 161, BIO 110.

**470 Population Biology (3)** A quantitative, second course in ecology, emphasizing distributional patterns and fluctuations in abundance of natural populations. (2-3) PREREQ MAT 121, 161, BIO 370.

**475 Plant Communities (3)** This course is designed to survey the major plant communities of our region and introduce the student to a variety of sampling techniques for measuring and describing plant populations. A preliminary investigation into the dynamics of each will be made. Students will also become familiar with the common plant species in each community. (2-3) PREREQ. BIO 115.

**476 Limnology (3)** The measurement and analysis of the physical, chemical, and biological properties of lakes. (2-3) PREREQ: BIO 110, CHE 103-104.

**480 Light Microscopy and the Living Cell (3)** A one semester lecture and lab course covering the theory and practical techniques of all types of light microscopy and their uses in investigating living cells. Also includes such techniques as microinjection, cell electrophysiology, and others. Strong emphasis on "hands-on" work with equipment. (2-2).

**484 Epidemiology (3)** A general study of the epidemiology of both infectious and non-infectious diseases, including industrial and environmentally related health problems. (3) PREREQ: BIO 214

**485 Plant Taxonomy (3)** Principles of evolution as illustrated by the principles of plant taxonomy. Modern concepts of biosystematics. Practical experience in plant identification. (2-3) PREREQ: BIO 115

**490 Biology Seminar (1)** Reports on special topics and current developments in the biological sciences. PREREQ: 18 hours of biology.

**491 Special Problems in Biology (1 to 3)** Tutorial course primarily for advanced undergraduate biology majors capable of independent study and research on a problem approved by the supervising instructor PREREQ: Consent of instructor

**SCB 350 Science Education in the Secondary School (3)** A methods course emphasizing knowledge of curricular development and skill in planning, involving the design and execution of learning activities for all instructional modes. (2-2) PREREQ: BIO 150 for biology majors.

# Business Administration

Hung M. Chu, *Chairperson*

**PROFESSORS:** Ballas, Chu, Green

**ASSOCIATE PROFESSORS:** Morgan, Selvanathan

**ASSISTANT PROFESSORS:** Demiantschuk, Talaga, Taylor

The primary objective of the Department of Business Administration is to prepare students for careers in management/marketing, in either business or government organizations.

To accomplish this objective, the faculty of the Department of Business Administration will strive:

(1) To create an understanding of the role business plays in the American social and economic systems.
(2) To assist students to acquire the skills required for a successful career in business.
(3) To enhance student understanding and mastery of leadership skills and modern management techniques.
(4) To enhance student understanding of the functioning of business-type organizations so that they may make a more effective contribution to their employer and to society after graduation.

The department urges students interested in international business to consider a minor in modern foreign language (18 semester hours beyond the introductory course). Entering freshmen who desire the foreign language minor should consult the Department of Foreign Languages at once to arrange start of the course sequence.

The Department of Business Administration offers three programs:

(1) The B.S. in GENERAL BUSINESS is designed for students who wish to pursue a flexible business program tailored to their own needs and interests.
(2) The B.S. in MANAGEMENT focuses on functions required to make a group of people work effectively together as a unit. These functions include planning, organizing, staffing, directing and controlling.
(3) The B.S. in MARKETING focuses on activities required to get goods and services from producers to consumers. Emphasis is on understanding consumers' needs and designing strategies to meet these needs.

**REQUIREMENTS COMMON ALL PROGRAMS**

| | |
|---|---|
| 1. General Requirements (Include ECO 111*, see appropriate curriculum guidance sheet and catalog pp. 30-32). | 51 s.h. |
| 2. Business and Economics Core ECO 112*, ACC 201*-202*, BLA 201*, ECO 251-252, | 39 s.h. |

MKT 301*, MGT 301*, FIN 325, MKT 327, MGT 303, ECO 335, MGT 405
(* A minimum grade of C must be attained in each of these courses)
3. Other courses required by business program: CSC 101, MAT 107. These courses satisfy and are included under general requirements.
4. Other courses required: MAT 108 3 s.h
5. Major concentrations: 15 s.h.
6. Economics or Business Electives 9 s.h.
7. Free Electives 12 s.h.

**Admission and Advising**
Students are advised by the faculty of the Department of Economics until 64 undergraduate credits have been completed. Thereafter, students may select their concentration if they have met department requirements and will be advised by faculty in the area of concentration.

**MAJOR REQUIREMENTS**
**BACHELOR OF SCIENCE — GENERAL BUSINESS**
Choose 15 credit hours of 300-400 level courses from three of the following areas:
Accounting, Economics/Finance, Management, Marketing 15 s.h.

**BACHELOR OF SCIENCE — BUSINESS MANAGEMENT**
MGT 302, MGT 400, MGT 402, MGT 406, MGT 408 15 s.h.

**BACHELOR OF SCIENCE — MARKETING**
MKT 303, MKT 320, or MKT 322, MKT 400, MKT 404, MKT 408 15 s.h.

## COURSE DESCRIPTIONS

### LAW
Symbol: BLA

**201 American Legal System (3)** Examines the enforcement of social goals upon business organization through law. The constitutional basis for administrative regulation of business, the practice and nature of administration regulation, administrative procedure, and the principal subjects of current administrative regulation will be surveyed.
**202 Special Subjects in Business Law (3)** Covers the legal topics of contracts and sales in depth. It is intended as a partial preparation for the Uniform C.P.A. Examination and thus provides students with an adequate knowledge of the most widely examined subjects. Provides marketing students with a detailed knowledge of the legal topics which they will use in their careers and covers basic legal topics highly useful to management majors and all persons engaged in practical business related occupations.
**303 Legal Problems in Business (3)** Special legal problems in business will be considered at length, such as consumer credit regulation, insurance, personal law relating to decedent's estates and social security, preparation for the CPA examination, etc. This course may be taken more than once (but not more than three times) for credit if the subject matter of the course is not duplicated.

### GENERAL BUSINESS

Please see course descriptions in appropriate areas.

### INTERNATIONAL BUSINESS
Symbol: INB

**301 Introduction to International Business (3)** Analysis of international business transactions in large and small businesses, multinational and domestic. Functional emphasis on multinational environment, managerial processes, business strategies.
**302 International Legal Environment (3)** Study laws governing international economic activities, public and private law (conflicts of laws). Basic differences between American and foreign legal systems will be analyzed. Differences in organizing companies, security laws, antitrust laws, trade regulations are also studied.
**338 International Economics (3) (also ECO 338)**
**401 International Finance (3)** Development of financial managerial knowledge and skills to understand the working of the corporate financial function in a global setting. PREREQ: FIN 325.
**402 International Management Seminar (3)** Study issues confronting executives as they plan, organize, staff and control in a multinational organization. Lectures, case analyses and outside projects with local firms engaged in, or entering international business will be utilized. PREREQ: MGT 301.
**403 International Accounting (3)** Deal with accounting problems which are peculiar to international or multinational businesses. The financial reporting requirements for foreign income and investments of the FASB and SEC will be analyzed as they affect depreciation, foreign exchange, and statements of income and expenses. PREREQ: ACC 201.
**404 International Marketing (3) (also MKT 404)**

### MANAGEMENT
Symbol: MGT

**101 Introduction to Business (3)** A survey of the structure and function of the American business system. Topics covered: forms of business organization, fundamentals of management, fundamentals of marketing; basic accounting principles and practices; elements of finance, money, and banking; business and government, careers in business. Open to non-business majors.
**301 Principles of Management (3)** An introduction to the management process. The history, theory of organization; principles and functions of management, decision making, leadership and motivation.
**302 Human Resources Administration (3)** The study of a well-planned properly executed and efficiently evaluated approach to manpower recruitment, screening, usage, and development. Case analysis and/or experimental exercises to illustrate the concepts used. PREREQ: MGT 301 or consent of instructor.
**303 Production and Operations Management (3)** Methods analysis, work measurement, wage incentives. Production process and system design. Plant location, layout, sales forecasting, inventory, production, and quality control, to include statistical aspects of tolerances, acceptance sampling, development of control charts, PERT, and cost factors. PREREQ: MGT 301, ECO 111, 112, 251, 252.
**334 Labor Relations (3)** Rise of the American labor movement. Labor legislation. Labor compensation under collective bargaining arrangements. Procedures in settling labor disputes. Organized labor's policies and practices for higher wages and improved working conditions. PREREQ: MGT 301.
**400 Senior Seminar in Management (3)** Students are engaged in reading and research on current developments in management. Research project is required to help expand and deepen the horizons of the participants. PREREQ: Senior standing.
**401 Entrepreneurship (3)** The organization of a business venture with emphasis on the risk of the initial operation, and management. Consulting opportunities are provided and periodic progress report required. PREREQ: MGT 301, 302 or instructor's approval.
**402 Organization Theory and Behavior (3)** Study of the theoretical foundations of organization and management. The system of roles and functional relationships. Practical application of the theory through case analysis. PREREQ: MGT 301, 302.
**405 Business Policy and Strategy (3)** This course is designed to integrate and apply the knowledge, theories, and techniques derived from the study of business disciplines. The case method is used to formulate improved business strategies and plans. Written reports. PREREQ: Senior standing.
**406 Introduction to Management Science (3)** Business problems in production, inventory, finance, marketing and transportation translated into application of scientific methods, techniques, and tools to provide those in control of the system with optimum solutions. PREREQ: MGT 303 or instructor's approval.
**407 Systems Management (3)** The application of systems theory and principles to the operation of contemporary organizations, with emphasis on non-quantitative methods of analysis. PREREQ: MGT 402.
**408 Business and Society (3)** An analysis of social, political, legal, environmental and ethical problems faced by business firms. Open to non-majors.
**410 Independent Studies in Management (1-3)** Special research projects, reports, readings in management. Open to seniors only. PREREQ: Instructor's approval.

**MARKETING**
Symbol: MKT

**301 Principles of Marketing (3)** A study of marketing in our consumer oriented society and the management of marketing activities, including buying, selling, promotion, physical distribution, product planning, and consumer behavior. PREREQ ECO 131.
**303 Consumer Behavior (3)** Foundations of consumer behavior. Market structure and consumer behavior; purchase strategy and tactics; determinants and patterns of consumer behavior An integrated theory of consumer behavior is sought PREREQ. MKT 301.
**320 Managing Sales (3)** Source, technique, and theories applied to problems encountered in managing a sales force in the areas of administration, policy, organizational structure, personnel selection and evaluation, sales training, compensation, forecasting, establishing territories and quota, and sales analysis. Emphasis on case studies. PREREQ. MKT 301
**321 Salesmanship (3)** Analysis of the selling process applied to sales calls and sales strategies, communication, persuasion, motivation, ethics, interpersonal relationships, negotiations, and professionalism. Emphasis on case studies. PREREQ: MKT 301.
**322 Advertising and Sales Promotion (3)** A study of advertising and sales promotion management with a major focus on organization, media, strategy, campaigns, legal control, consumer behavior, budgeting, and the coordination of these activities with the overall marketing programs. PREREQ: MKT 301.
**327 Marketing Management (3)** Study of policy decision-making. Organization and analysis of marketing opportunities; policy decisions regarding product, price, marketing channels, physical distribution, advertising, and sales marketing models and systems. PREREQ: MKT 301.
**400 Senior Seminar in Marketing (3)** A capstone course designed to offer the student practical experience in the policies and practices of the American marketing system A deeper understanding and appreciation of the marketing executive's effort to balance the firm's objectives with existing or potential market opportunities The class works in groups. Emphasis on field work, consulting, computer simulations, case development PREREQ: Senior standing or instructor's permission.
**401 Marketing Channels (3)** Distribution strategy; efficient planning of space, time, and distribution costs to meet consumer demand; alternatives in channel structure, policies, management, and leadership; methods for improving channel performance; channel strategy in the future. PREREQ: MKT 301.
**404 International Marketing (3)** Historical and theoretical background of foreign trade; world marketing environment, world market patterns, marketing organization in its international setting; international marketing management PREREQ: MKT 301.
**408 Marketing Research (3)** Systematic definition of marketing problems; strategies for data collection; model building; interpretation of results to improve marketing decision-making and control PREREQ: MKT 301, ECO 251, ECO 252.
**410 Independent Studies in Marketing (1-3)** Special research projects, reports, readings in marketing. Open to seniors only PREREQ. Instructor's approval.

# Chemistry

## (See also Pre-Medical Program)

Andrew J. Goudy, *Chairperson*
**PROFESSORS:** Durand, Fenton, Goudy, Mangravite, Rudnick, Torop
**ASSOCIATE PROFESSORS:** Magnuson, Moran, Sevem, Witonsky
**ASSISTANT PROFESSORS:** Barth, Ghoroghchian, Reid, Ressner

The Department of Chemistry offers five undergraduate degree programs:

(1) The B.S. in CHEMISTRY program enables students to receive basic preparation required for the chemical careers of their choice. Such choices include college and university teaching, positions as professional chemists, research work, and various services in industry and government. In all cases, the program prepares students for graduate study in the field of chemistry.
(2) The B.S. in CHEMISTRY-BIOLOGY* (Pre-Medical) provides the core courses required for admission to schools of medicine, dentistry and veterinary medicine. It also enables the student to pursue a career in biochemistry and molecular biology. Students in this program must apply before being admitted to the Pre-Medical Program.
(3) The B.S. in CLINICAL CHEMISTRY is a program which trains students for careers in hospital or private clinical chemistry laboratories. A one semester internship in a hospital clinical chemistry laboratory is a mandatory part of this program. Students completing the program are eligible for certification as clinical chemistry technologists by the National Registry in Clinical Chemistry.
(4) The B.S. in FORENSIC CHEMISTRY is a program which will train students interested in working in criminalistics and toxicology laboratories. The program prepares students for graduate study and specialization in these fields. A one-semester internship in a police or toxicology forensic-chemistry laboratory is a mandatory part of this program.
(5) The B.S. in EDUCATION in CHEMISTRY program prepares the student for a career in teaching chemistry in the secondary schools. The program enables the student to gain experience in the major branches of chemistry so that, with proper selection of electives, graduate work in either pure chemistry or chemical education can be pursued. Sufficient flexibility is provided so that the student may also become certified in general science.

The Department of Chemistry is accredited by the American Chemistry Society, which provides its professional certification to graduates of the B.S. in chemistry program.

### Internship Program

Although internships are not a mandatory part of all chemistry programs, they are available to majors on a selective basis. Students receive varying amounts of credit based upon the number of hours spent in a work situation and upon the nature of the academic work necessary during the internship. Credit varies from three to fifteen semester hours; each eight hour workday per week is equivalent to three semester hours.

Majors in the five B.S. programs should consult the Chemistry Department handbook and their advisor for current requirements. A grade of at least "C" (2.0) or better is necessary in all required science and math courses.

### REQUIREMENTS COMMON TO ALL DEGREE PROGRAMS

| | |
|---|---|
| 1. General Requirements | 51 s.h. |
| 2. Chemistry Requirements | 10 s.h. |
| CHE 103-104 | |
| CRL 103-104 | |
| 3. Other Science Requirements | 8 s.h. |
| PHY 170-180 | |

4 Mathematics Requirements 11 s.h.
MAT 161-162, CSC 141

**BACHELOR OF SCIENCE—CHEMISTRY**

1. Required Chemistry Courses 43 s.h.
CHE 231, 232, 233, 321, 341, 342, 343, 411, 418, 424, 471, 491
CRL 232, 233, 321, 341, 342, 424
2. Chemistry Electives 6 s.h.
Selected from upper division chemistry courses
3. Other Required Courses 9 s.h.
Foreign languages, mathematics or computer science elective

**BACHELOR OF SCIENCE — CHEMISTRY-BIOLOGY***

1. Required Chemistry Courses 22 s.h.
CHE 231, 232, 321, 345, 471
CRL 232, 321, or 345 or 471
2. Required Biology Courses 24 s.h.
BIO 110, 117, 330, 357, 448, 468
3. Other Required Courses 6 s.h.
MAT 121
Concentration Elective

**BACHELOR OR SCIENCE — FORENSIC CHEMISTRY**

1. Required Chemistry Courses 45 s.h.
CHE 231, 232, 321, 345, 371, 418, 450, 471, 479
CRL 232, 321, 345, 371, 471
2. Other Required Courses 14 s.h.
BIO 110, 468; CRJ 200; MAT 121

**BACHELOR OF SCIENCE IN EDUCATION — CHEMISTRY**

1. Required Chemistry Courses 24 s.h.
CHE 231, 232, 321, 341 or 345, 411, 418, 491
CHL 232, 321, 345
2. Required Education Courses 30 s.h.
EDF 100, EDP 250, EDM 300, EDP 351
SCE 350, EDS 412, EDS 306
3. Chemistry Electives 5 s.h.
Selected from upper division chemistry courses

**BACHELOR OF SCIENCE IN CLINICAL CHEMISTRY**

1. Required Chemistry Courses 46 s.h.
CHE 231, 232, 321, 341 or 345, 381, 418, 424, 450, 471, 491
CRL 321, 341 or 345, 381, 424, 471
2. Other Required Courses 11 s.h.
BIO 110, 468; MAT 121

## COURSE DESCRIPTIONS

CHEMISTRY
Symbol: CHE
Symbol for Chemistry Labs: CRL
(2-2) represents 2 hours lecture and 2 hours lab

***100 Essentials of Chemistry (4)** Fundamentals of inorganic, organic, and biological chemistry as applied to the contemporary problems of society. A one semester course with laboratory exercises which best serves students pursuing careers in health and physical education. (3-1)

**101 Fundamentals of Chemistry (3)** A mathematically oriented course for students who intend later to take CHE 103 but whose science and mathematics backgrounds are judged by a pretest to need remediation.

***102 Concepts of Chemistry (3)** A broad survey course with a laboratory experience that seeks to develop an understanding of the field of chemistry through inquiry. Basic competence in scientific methods and procedures will be obtained by observing chemical reactions and studying the chemical and physical properties of a variety of compounds. (2-2)

**† 103-104 General Chemistry I-II (3) (3)** Basic laws and theories of chemistry including atomic structure, chemical bonding, oxidation-reduction, solutions, and ionic equilibria Correlations of chemical principles and their application to modern descriptive chemistry CHE 103 must precede CHE 104 Labs: CRL 103-104

**CRL 103-104 Experimental General Chemistry I-II (2) (2)** Basic laboratory studies in college chemistry utilizing the quantitative approach. Semi-micro qualitative analysis and inorganic preparations CONCURRENT OR PREREQ: CHE 103-104 CRL 103 must precede CRL 104
(1 hour recitation precedes 3 hours lab.)

**† 105-106 General Chemistry I-II Advanced Level (3) (3)** These courses are similar to CHE 103-104, but with a presentation that is in greater depth and rigor PREREQ. High School Chemistry or the equivalent and approval of the department chairperson. CHE 105-106 may be substituted for CHE 103-104 as prerequisites for advanced level chemistry courses.

**CRL 105-106 General Chemistry I-II Advanced Level Laboratory (2) (2)** These laboratories are similar to CRL 103-104 CONCURRENT OR PREREQ: CHE 105-106. CRL 105 must precede CRL 106.

**230 Introduction to Organic and Biological Chemistry (3)** A terminal course in fundamentals of organic chemistry. Structural theory of organic molecules, organic synthesis, and biological applications PREREQ. CHE 104

**231-232-233 Organic Chemistry I-II-III (4) (3) (3)** A comprehensive study of the structure and reactions of organic molecules, 231 must precede 232 which must precede 233. Lab. CRL 232-233. PREREQ: CHE 104 or CHE 106.

**CRL 232-233 Experimental Organic Chemistry I-II (2) (2)** Basic laboratory skills in organic chemistry including classical as well as instrumental techniques Organic synthesis and modern spectrophotometric methods of identification. CONCURRENT OR PREREQ: CHE 232-233. CRL 232 must precede CRL 233.

**300 Fundamentals of Radioisotope Techniques (3) (Also PHY 320)** Biological, chemical, environmental and physical effects of nuclear radiation. Radiation detection instrumentation and radio tracer methodology. (2-2) PREREQ: CHE 104 or CHE 106 and PHY 180 or 140.

**321 Analytical Chemistry I (3)** Fundamental principles of analytical chemistry Theory of gravimetric and volumetric methods of analysis Lab. CRL 321, PREREQ CHE 104 or CHE 106.

**CRL 321 Analytical Chemistry I Laboratory (2)** Practical experience in modern techniques of chemical analysis with emphasis on volumetric and gravimetric methods. CONCURRENT OR PREREQ: CHE 321

**SCC 327 Electron Microscopy I (3) (Also ESL 327)** An introductory lecture/lab course in theory, operation, and applications of electron beam microscopy PREREQ: One year of physics, one year of chemistry.

**SCC 329 Electron Microscopy II (3) (Also ESL 329)** A one-semester lecture/laboratory course in advanced theories, operation, and applications of electron microscopy in scientific research. Emphasis on individual projects. PREREQ: SCC 327

**341-342-343 Physical Chemistry I-II-III (3) (3) (3)** The mathematical laws and theories of chemistry including thermodynamics, reaction kinetics, quantum and statistical mechanics, theory of chemical bonding and molecular structure. Lab: CRL 341-342. PREREQ. CHE 104 or 106, PHY 180, MAT 142 or MAT 162.

**CRL 341-342 Experimental Physical Chemistry I-II (2) (2)** Laboratory exercises in illustrating principles of thermodynamics, kinetics, and quantum mechanics. CONCURRENT OR PREREQ. CHE 341-342.

**345 Fundamentals of Physical Chemistry (3)** A survey of the fundamental topics in physical chemistry with applications to biology and medicine. Primarily for biology, chemistry-biology and pre-professional majors. Lab. CRL 345. PREREQ: CHE 232, MAT 141 or MAT 161, PHY 180 or PHY 140.

**CRL 345 Basic Experimental Physical Chemistry (2)** Experiments illustrating the laws of physical chemistry. Primarily for biology, chemistry-biology, and pre-professional majors. CONCURRENT OR PREREQ CHE 345

**371 Forensic Chemistry (3)** Introduction to criminalistics (chemical forensic analytical techniques) with the role, functions, operations and organization of a scientific police laboratory PREREQ CHE 104 or 106, CHE 232.

*Approved distributive requirement course.
†Approved two-semester substitute for distributive requirement.

**CRL 371 Forensic Chemistry Lab (2)** Identification and comparison of trace evidence utilizing modern instruments and classical wet methods of chemical analysis CONCURRENT or PREREQ CHE 371

**381 Clinical Chemistry (3)** Analysis of biological fluids Clinical significance of enzyme, electrolyte, protein, and carbohydrate analysis Requires permission of instructor or preparation in organic chemistry and quantitative analysis. PREREQ or CONCURRENT: CHE 471 CONCURRENT: CRL 381.

**CRL 381 Clinical Chemistry Laboratory (2)** Lab for 381 Practical experience in analysis of biological fluids for diagnostic parameters. Nature of biological sampling, sample preservation, methodology, statistics, quality control. PREREQ or CONCURRENT: CHE 381, CHE 471, CRL 471.

**403 Chemistry of the Environment (3)** The chemistry of the atmosphere, hydrosphere, and biosphere; man's impact upon these areas. PREREQ CHE 104 May also be offered with lab (2-2).

**404 Foundations of Nutrition (3)** Proteins, lipids, fats, vitamins, and minerals and their role in normal metabolism; nutrition and disease, metabolism and biochemical individuality; cultural and political aspects of nutrition PREREQ CHE 104, CHE 230 or 231.

**408 Industrial Pollution (3)** Applications of elementary chemical engineering to the industrial complexities of the environmental processes. Emphasis on unit operations and unit processes applicable to pollution control and abatement. PREREQ. CHE 104.

**410 Advanced Independent Study or Chemical Research (3-6)** Taken under the direct supervision of a faculty member May be taken for two semesters for a total of six credits. PREREQ Senior standing or permission of department chairperson.

**411 Advanced Inorganic Chemistry (3)** The application of modern chemical theories to inorganic substances and reactions; the chemistry of the short and long transition elements PREREQ. CHE 341 or CHE 345

**417 History of Chemistry (1)** The history of chemistry and its predecessors from earliest times to present day. PREREQ: CHE 104 or CHE 106.

**418 Literature of Chemistry (1)** Instruction in the use of a modern chemical library, reference and data acquisition, synthetic procedures and computer data bases. PREREQ CHE 231

**419 Ethics and Human Values in Science (1)** A one semester course for science majors to acquaint students with ethical problems in their professional career PREREQ CHE 104 or CHE 106

**424 Analytical Chemistry II (3)** Basic principles of applied instrumental analysis. Special emphasis on the use of spectrophotometric and electroanalytical instrumentation Lab: CRL 424, PREREQ. CHE 321.

**CRL 424 Analytical Chemistry II Laboratory (2)** Practical experience in the choice and application of instrumental methods of analysis to chemical systems. CONCURRENT OR PREREQ CHE 424

**435 Qualitative Organic Analysis (5)** A laboratory course in classical and instrumental methods for identification of organic compounds. PREREQ CRL 233, CRL 321, CHE 418, or permission of instructor (2 hours lecture).

**CRL 435 Qualitative Organic Analysis Lab (0)** This laboratory is required of students taking CHE 435. Wet chemical techniques for functional group identification and derivative preparation are combined with modern instrumental methods such as infrared, ultraviolet and NMR spectroscopy to provide the methodology for rapid, efficient identification of unknowns. Six hours of lab per week

**436 Polymer Chemistry (3)** Polymerization kinetics, rheology of polymer melts, crystallization parameters, and monomer reactivity in copolymerization PREREQ: CHE 232.

**450 Internship in Chemistry (3-15)** A full or part-time work study appointment in a hospital, commercial, governmental or industrial laboratory supervised jointly by an on-site and chemistry department faculty member. PREREQ: permission of department internship committee.

**471 Fundamentals of Biochemistry (3)** Structure and chemistry of proteins and nucleic acids; molecular biology, physio-chemical methods for biomacromolecules, enzymes, and the molecular basis for some physiological phenomena. Lab: CRL 471 PREREQ CHE 345 or equivalent, CHE 232.

**CRL 471 Experimental Biochemistry (2)** Laboratory exercises in the fundamentals of biochemistry. CONCURRENT OR PREREQ. CHE 471

**479 Chemical Toxicology (3)** A one semester course in the environmental and physiological aspects of chemical toxicity Special emphasis will be placed on documentation, sampling and verification of materials. PREREQ. CHE 232.

**CRL 479 Chemical Toxicology Laboratory (2)** A one semester course in the basic principles of toxicological analysis. CONCURRENT OR PREREQ: CHE 479

**480 Introduction to Chemical Research (2-6)** This course is intended to introduce the student to the methodology and technique involved in carrying out independent chemical research The student is assigned an independent project and given background literature readings. After sufficient familiarity with the project has been attained, the student is assigned an area in the research lab and initiates experiments. A faculty member works closely with the student in the lab familiarizing the student with new techniques. PREREQ. Senior standing or permission of department chairperson.

**491 Seminar in Chemistry (2)** Oral presentation of papers based upon laboratory or library research. PREREQ: permission of department chairperson

**SCC 370 Science and Human Values (3)** A one semester course illustrating the impact of science on human thought, values, and institutions. Ethical, sociological, and psychological aspects of science-mediated change are covered in depth.

# Childhood Studies and Reading

Joan Hasselquist, *Chairperson*

K. Eleanor Christensen, John H. Grafton, *Assistant Chairpersons*

**PROFESSORS:** Hall, Holman, Keetz, Maxim, Peta, Radich, Ziegler

**ASSOCIATE PROFESSORS:** Brice, Chern, Christensen, Dunlap, Gibson, Grasty-Gaines, Habecker, Hasselquist, Jacecko, Petkofsky, Szabo, Zimmerman

**ASSISTANT PROFESSORS:** Grafton, Hasson, Maggitti

The Department of Childhood Studies and Reading certifies teachers for elementary education (K-6), and early childhood education (NK-3).

The B.S. Ed in ELEMENTARY EDUCATION curriculum is designed to provide a broad background of general education, an understanding of children, and the knowledge and skills needed to teach all aspects of the elementary school program. Upon satisfactory completion of the approved program, the student will qualify for a Pennsylvania Instructional I Certificate, valid for six years of teaching in kindergarten and grades one through six.

The B.S. Ed. in EARLY CHILDHOOD EDUCATION curriculum is designed to provide both the liberal education and special preparation required for careers in public and private school teaching and directorship and supervisory work in early childhood programs other than those under the auspices of the public schools. Upon satisfactory completion of the program, the student will qualify for a Pennsylvania Instructional I Teaching Certificate valid for six years of teaching in preschool, kindergarten, and grades one through three.

### REQUIREMENTS COMMON TO BOTH PROGRAMS

1. General Requirements: See Pages 30–32. 51 s.h.
   Literature, philosophy, art, MAT 101, MAT 102, and Introduction to Psychology are required.
2. Professional Education 12 s.h.
   EDF 100, EDP 250, EDM, 300, EDP 351*

### BACHELOR OF SCIENCE IN EDUCATION — ELEMENTARY EDUCATION

**(Curriculum K-6)**

1. Specialized Preparation 61 s.h.
   EDE 200, EDE 251*, EDE 310*, EDE 311*, EDE 312*, EDE 332, EDE 352, EDE 401, EDE 406, EDE 410, EDE 411, HEA 301, LIT 395, MAT 351***, MUE 231**, PED 200, SCE 310*.
   *Courses requiring prerequisites — check catalog.
   **Placement examination required.
   ***Prerequisites are MAT 101 and MAT 102 (unless waived by examination).
2. Elective Area (See Concentration Areas)

In order to meet the degree requirements, the student must choose from concentration areas by selecting: (1) any one of the concentrations or (2) any combination of courses from any combination of concentrations. The teaching certificate is not affected by any chosen area except for the certification programs in private school, early childhood, and environmental education. Concentrations in disciplines should be pursued under advisement.

Concentrations outside of those offered by this department should be planned in consultation with the chairperson or assigned advisor of the specific discipline.

NOTE: Art and physical education courses may count toward the General Requirements.

### BACHELOR OF SCIENCE IN EDUCATION — EARLY CHILDHOOD EDUCATION

**(Curriculum NK-3)**

Specialized Preparation 72 s.h.
ECE 100, ECE 101*, ECE 105, LIT 352, ECE 201*, ECE 202, HEA 211, ECE 210, MUE 232, ECE 250, PED 449, ECE 301*, ECE 305*, MAT 351a*, ECE 306, ECE 307, ECE 405, ECE 410, ECE 411
*Courses requiring prerequisites — check catalog.
Admission to the Early Childhood Certification Program is limited. Freshmen should apply during the first semester of their freshmen year.

NOTE: The music and physical education courses may count toward the General Requirements.

### APPLICATION AND APPROVAL FOR STUDENT TEACHING.

Student teaching in early childhood (ECE 410 and ECE 411) and in elementary education (EDE 410 and EDE 411) is by application through the department. To apply, the student must complete 96 semester hours with a cumulative G.P.A. of 2.50 prior to the student teaching semester. Included in the 96 credits will be the completion of all professional education courses and all specialized preparation courses with a G.P.A. of 2.50. (See also student teaching, p. 119.)

An application for student teaching must be filed in February prior to the academic year in which student teaching is to be scheduled. Application meetings will be announced at the beginning of the Spring Semester each year. Scheduling student teaching is done as for other courses.

**The following policies apply to all students entering the Department of Childhood Studies and Reading.**

INTERNAL TRANSFER STUDENTS (undeclared majors and change of majors) who desire admission into the Department of Childhood Studies and Reading may apply after the completion of 30 s.h. at West Chester University. Of the courses listed under Specialized Preparation (see above) only ECE 100, EDE 200, and EDE 251 may be taken for degree credit prior to formal acceptance into the department. A cumulative grade point average of 2.0 or above plus an interview are prerequisites for acceptance into the department.

STUDENTS TRANSFERRING FROM COMMUNITY COLLEGES AND JUNIOR COLLEGES who desire admission into the Department of Childhood Studies and Reading may apply only with a grade point average of 2.0 or higher. Transfer credit will be granted for EDF 100, EDP 250, ECE 201, ECE 202, ECE 203, EDE 200, and EDE 251 if (a) the course descriptions are equivalent and (b) the grade is C or above. All other required courses in the professional education and specialized preparation areas will be evaluated and approved on an individual basis.

### MINOR FIELDS OF STUDY IN DEPARTMENT OF CHILDHOOD STUDIES AND READING

A. *Early Childhood Education*: ECE 201 or EDE 251; ECE 202, ECE 203, ECE 204, ECE 405.

B. *Elementary Education*: EDE 251, EDE 310, EDE 311, EDE 401, EDE 406; Free elective, EDE course, with approval of the department.

C. *Reading* — Required courses for all students: EDE 311 or ECE 210, EDE 422, EDR 320, EDR 321
Elementary and Early Childhood students: EDE 312 or ECE 305; EDE 458
Secondary students: EDR 313
Electives — for all students — (1-2 courses by advisement) LIN 250, SPC 415, SPC 250, PHI 360, SPP 101, LIN 380, LIN 381, PSY 475,
EDE 401.

### COURSE DESCRIPTIONS

CHILDHOOD STUDIES AND READING
Symbol: ECE

**100 Orientation to Early Childhood (3)** An introduction to the history and philosophy of Early Childhood Education. Field observations in a variety of settings provide the student with an opportunity for career decision making.

**101*** Child Development (0-2 Yrs.) (3)** Physical, social, emotional, and intellectual development of the child 0-2 years. Parallels are drawn from this phase of child development to students' self-development. This course must be taken the same semester with ECE 105 See below. PREREQ: PSY 100.

**105*** Infant Learning Environment and Field Experience (6)** The study of and use of developmental tests for the diagnosis of infant needs. The relationship of developmental level to the structuring of learning environment is developed as students interact with infants in school and home settings for three hours per week. This course must be taken the same semester with ECE 101 See above.

**201* Child Development (2-5 Yrs.) (3)** Physical, social, emotional, intellectual and moral development of the child 2-5 years. Parallels are drawn from this phase of child development to students' self-development. PREREQ. PSY 100.

**202* Preschool Learning Environment (3-6)** Methods and materials for structuring the classroom environment for the child 2-5 years. Readiness skills and concepts in all curricular areas are addressed

**204 Early Childhood Programs (3)** Study of contemporary program models in Early Childhood Education. Major trends in education of young children are defined.

**210*** Introduction to the Language Arts (3)** The areas of listening, speaking and writing are studied in depth. Knowledge, teaching and evaluative techniques are addressed. Introduction to the reading process and the relationship of language to reading will also be studied

**250*** Creative Arts for the Young Child (3)** Workshop, seminar and field experiences provide opportunities for students to explore, manipulate and analyze a wide variety of media and techniques

* Open to Early Childhood and Elementary Education majors or permission of instructor
** Open to Elementary Education majors only
*** Open to Early Childhood majors only.

appropriate for use with young children. Activities are aimed at encouraging the development of the young child's creative potential through the arts.

**301*** Child Development (5-8 Yrs.) (3)** Physical, social, emotional, intellectual, and moral development of the child 5-8 years. Parallels are drawn from this phase of child development to students' self-development. PREREQ: PSY 100.

**305*** Teaching Reading and Field Experience (Primary Grades) (6)** The teaching of reading and its mastery is the focus of this course. Students apply knowledge of theories and practices in supervised field placements in schools with children 5 to 8 years. Tutoring of individual children and small groups is integrated with planning and evaluation of lessons and activities as well as remediation. PREREQ: ECE 210.

**306*** Child's Social Environment (3)** A consideration of methods of instruction that best generate a social education meaningful to primary grade children. Emphasis is placed on providing a learning environment that parallels the maturation of the young child.

**307*** Child's Physical Environment** A consideration of methods of instruction that best generate a child's knowledge of the physical world which is meaningful to primary grade children. Strategies for cognitive skills and affective growth in these areas are stressed.

**405* Administration and Supervision of Early Childhood Programs (3)** Principles of administration and supervision of programs for young children. Includes parent education and community relations.

**410*** Student Teaching (6)** (1st half of semester)

**411*** Student Teaching (6)** (2nd half of semester) Two separate student teaching experiences are required; one in Nursery or Kindergarten and one in grades 1-2 or 3. Weekly practicum sessions are required. PREREQ: See Application and Approval for Student Teaching.

**498 Workshop in Early Childhood Education (3)** Offers wide variety of experiences to help prepare students to provide an environment for optimal growth of children in preschool and primary grades.

## Symbol: EDE

**200* Theory and Field Experiences in Elementary Education (3)** Orientation to the curricula, processes, and structures of elementary education today. Field experiences related to course topics.

**251 Child Development and Behavior (3)** Emotional, social, mental, moral, physical, and self factors shaping human behavior with emphasis on child and early adolescent development. Specific application to classroom settings. PREREQ PSY 100.

**253 Human Development and Behavior (3)** Physical, mental, emotional, social, moral, and self factors shaping human behavior throughout the life cycle; specific application to work with individuals and groups in educational settings. PREREQ PSY 100.

**254 Development in the Middle School Child (3)** Characteristic development and behavior of children between 10 and 15 years of age; understanding and working with these children in educational settings. PREREQ: EDE 251, 253 or their equivalent

**310 Communication Skills in the Elementary School (3)** Study of teaching the language skills in the elementary school: listening, speaking, and writing. Students also participate in a tutorial program in local schools. PREREQ: EDE 251

**311 Introduction to Reading Instruction (3)** An exploratory course investigating the reading process, language and learning theories and their relation to reading, historical scope of and various programs of reading studied and evaluated. PREREQ EDE 251, 310 (or taken concurrently).

**312** Reading Instruction and Practicum (6)** Focus is on mastery of the teaching of developmental reading and early reading and pre-reading experiences. The students learn how to plan, teach and evaluate the reading/thinking skills related to the instruction of reading in the elementary classroom. Students work in the public schools with small and large reading groups teaching various aspects of the reading lesson. Students also learn how to evaluate pupil performance and remediate minor reading problems. PREREQ. 311 (Students need special permission to take 311 concurrently).

**315 Developmental Reading for the Handicapped Child (3)** The focus of this course is the study of the nature of the reading process and its relation to language development, motivation and methodology for developmental reading skills; reading programs and materials; problems in dealing with handicapped children; and practicum in reading instruction. Required course for special education majors only.

**330 Instructional Programs and Strategies (3)** Introduction to principles underlying the development of instructional programs in the schools. Strategies include cognitive and skill learnings and modes of teaching. Required course for special education majors only.

**332* Teaching Social Studies in the Elementary School (3)** Methods of teaching social studies and geography in the elementary curriculum. Techniques, current research projects, reading materials, audio-visual aids, resource persons, and field trips used as tools of learning. The organization, development, and use of resource units are stressed.

**352* Self And Group Processes in the Classroom (3)** Analysis of self processes influencing teacher-student classroom interactions. Role of needs, defenses, motives, emotions, and early learning experiences as they shape the prospective teacher's responses to elementary children. Application of social learning and interpersonal theory PREREQ: 251.

**401* Creativity in the Classroom (3)** Exploration of materials and processes of children's perceptions and behavior, aimed at encouraging the development of their critical and creative potentials.

**406 Classroom Management (3)** Detailed investigation into the elementary teacher's role in classroom management. Teacher influence, personality, and class interaction; class roles and expectation, seating plans; discipline, referral; the teacher's role in evaluating and identifying potential problems in children

**409 Independent Study (1-3)** Special topics or projects initiated by the student which will enable her/him to do extensive and intensive study in an area of elementary education which will sharply increase her/his knowledge of elementary education. PREREQ: permission of department chairperson.

**410** Student Teaching (6)** (1st half of semester)

**411** Student Teaching (6)** (2nd half of semester) Two separate student teaching experiences are required, one in grades K-3 and one in grades 4-6. Weekly practicum sessions are required. PREREQ: See Application and Approval for Student Teaching.

**412** Work-Study in the Elementary School (6)** Limited practicum for pre-service teachers who have taken EDE 200, 251, 311, 312, 406. Students work for a full term in one school district under supervision. Six credits may be granted toward student teaching requirements (EDE 411). PREREQ: departmental approval.

**421 Seminar in Elementary Education (3)** An intensive study of some current major developments in elementary education. Topics announced in advance. PREREQ. Senior standing and instructor approval

**422* Seminar in Reading (3)** Intensive study of some current major developments in reading related to elementary education. Topics announced in advance. PREREQ. instructor approval.

**423* Seminar in Communications Skills (3)** Intensive study of some current major developments in communications skills (language arts) related to elementary education. Topics announced in advanced. PREREQ: instructor approval.

**458* Language Arts/Reading for the Unique Child (3)** An open-ended course to help students understand and plan instructional programs for the linguistically different, the gifted, and those with special needs (mainstreaming). The students will examine various strategies, techniques, management, and viable programs for teaching these children language arts/reading.

**481* Constructing Activity-Oriented Teaching Materials (3)** A workshop experience for students interested in exploring the many facets of making activity-oriented learning materials for the elementary school classroom. PREREQ. EDM 300

**489 Teaching Skills to Combat Sexism (3)** This course is offered to create awareness in prospective teachers of the extent and consequences of sex-role stereotyping at all levels of educational experience. It will develop specific skills, behaviors, and classroom strategies that can eliminate effects of sexism in classrooms and on students and deal effectively with emotion-laden content of combating sex-role stereotypes.

**498 Workshop in Elementary Education (3)** Offers wide variety of experiences to help prepare students to provide an environment for optimal growth of children in grades K through 6.

## Symbol: EDR

**100 College Reading and Study Skills (3)** An individualized course to develop reading and study skills such as comprehension, vocabulary, speed, remembering, concentration, taking notes, mastering a text assignment, preparing for and taking examinations. Offered fall and spring semesters.

**110 Developing Learning Skills (1)** A course which reviews and develops the specialized learning skills such as concentrating when studying, reading a textbook assignment, taking notes, preparing for and taking examinations, which are needed to study effectively at the college level. Students who wish to review their study habits or who have special needs in the area of study skills should enroll in this course. Offered fall and spring.

**300 Developing Reading Rates (3)** A course which develops reading skills and techniques for

* Open to Early Childhood and Elementary Education majors or permission of instructor
** Open to Elementary Education majors only.
*** Open to Early Childhood majors only

adjusting reading speeds. Designed for students seeking advanced work or preparation for specific goals. PREREQ: consent of instructor Offered in spring.

**313 Reading Instruction and Practicum in the Secondary Schools (6)** Focus is on the mastery of teaching reading in the middle/secondary schools. Students will study the role of the teacher as well as learn how to sequence both developmental and content area readings

**320 Reading in the Content Areas (3)** Understanding the reading process and the need for reading instruction at the middle and secondary school level; specific skill development; reading in the content areas; readability; evaluation Offered fall and spring semesters.

**321 Diagnosis and Remediation of Reading Problems (3)** Identifying the nature and causes of reading disabilities; experience in helping a child with reading problems. Offered fall and spring semesters. PREREQ: EDE 311 or permission of instructor

**323 Reading for the Handicapped: Diagnosis and Remediation (3)** Reading materials, programs, evaluations, and teaching strategies for the mentally handicapped/physically handicapped are examined and discussed Students develop and utilize reading materials in a classroom situation. Offered spring semester. PREREQ: Permission of the instructor

* Open to Early Childhood and Elementary Education majors or permission of instructor.
** Open to Elementary Education majors only.
*** Open to Early Childhood majors only.

# Communicative Disorders

John L. Eberhart, *Chairperson*
**PROFESSOR:** Weiss
**ASSOCIATE PROFESSORS:** Aungst, Maxwell, Stratton
**ASSISTANT PROFESSORS:** Alson, Eberhart, Stigora, Stuart

The Department of Communicative Disorders offers two programs leading to the bachelor's degree.

1. The B.A. in COMMUNICATIVE DISORDERS is a pre-professional program which provides students with basic knowledge of human communication and communication disorders in preparation for graduate study in audiology, speech-language pathology, speech and hearing science or related health science or communication fields.
2. The B.S. in EDUCATION in SPEECH CORRECTION provides students with basic knowledge of human communication and communication disorders which qualifies them for the Pennsylvania Instructional I Certificate while preparing them for pursuit of graduate study.

Both degree programs provide the student with the opportunity to complete much of the undergraduate preparation which is applicable to fulfilling the requirements for the Certificate of Clinical Competence (CCC) from the American Speech-Language-Hearing Association (ASHA).

The department operates a Speech and Hearing Clinic which serves as a teaching-training facility for the academic program. The clinic provides diagnostic and therapeutic services for children and adults with speech and hearing problems. These services are available to individuals from the University as well as from the surrounding communities.

**BACHELOR OF ARTS — COMMUNICATIVE DISORDERS**

| | |
|---|---|
| 1. General Requirements, see pages 30-32. | 51 s.h. |
| 2. Foreign Language and Culture | 9-15 s.h. |
| 3. Related Areas<br>These courses are to be selected under advisement from a department-approved list. | 24 s.h. |
| 4. Communicative Disorders Concentration<br>SPP 101, 106, 107, 203, 223, 236, 343, 350, 351 (plus six credits of major electives) | 33 s.h. |
| 5. Electives | 6-21 s.h. |

**BACHELOR OF SCIENCE IN EDUCATION — SPEECH CORRECTION**

Each student must complete the following requirements:

| | |
|---|---|
| 1. General Requirements, see pages 30-32. | 51 s.h. |
| 2. Cognate Courses and Electives<br>These courses are to be selected under advisement from a department-approved list. | 6 s.h. |
| 3. Professional Education<br>EDA 241, EDF 100, EDP 250, PSY 375, PSY 325, SPP 411-412, 470 | 30 s.h. |
| 4. Specialized Preparation<br>PHY 110, SPP 101, 106, 107, 203, 223, 236, 323, 343, 346, 350, 351, 352, 471 | 42 s.h |

**COURSE DESCRIPTIONS**
COMMUNICATIVE DISORDERS
Symbol: SPP

**101 Introduction to Communicative Disorders (3)** An introductory survey of normal processes and disorders of speech, language, and hearing. Suitable for non-majors.

**106 (also SPC 106) Introduction to Phonetics (3)** Study of the sounds of the English language. Development of skill in their recognition, production, and transcription PREREQ: SPP 101 or permission of instructor

**107 Speech and Language Development (3)** Theoretical origin of speech in mankind and the development of language and speech in the individual Normal development of speech and language is stressed PREREQ SPP 101 or permission of instructor

**203 Anatomy of Speech and Hearing Mechanisms (3)** A study of embryology, normal development, neurology, and physiology of anatomical structures of the speech and hearing mechanisms

**223 Voice and Articulation Disorders (3)** The symptomatology, etiology, diagnosis, and treatment of communication disorders associated with articulation and voice. PREREQ: SPP 101 and 106

**236 Language Disorders (3)** The symptomatology, etiology, diagnosis, and treatment of language disorders in children and adults including the mentally retarded, emotionally disturbed, neurologically impaired, and hearing impaired. PREREQ: SPP 107, 223

**323 Neuromuscular Disorders and Stuttering (3)** The symptomatology, etiology, diagnosis and treatment of communication disorders associated with stuttering and neuromuscular disorders. PREREQ: SPP 223 or consent of instructor

**340 Development and Disorders of Language (3)** An examination of normal language development and its psycholinguistic, neurological, and social dimensions. Special education considerations for children with language disorders. PREREQ: EDA 101 or 102 is required, SPP 101 is recommended

**343 Introduction to Audiology (3)** An introduction to audiology and its relationship to other medical and educational fields concerned with hearing impairments. Developmental, medical, social, physical, and psychological properties of hearing and

sound are explored Evaluative techniques are introduced with opportunity for limited practical experience.

**346 Aural Rehabilitation (3)** Medical, prosthetic, and educational approaches to aural rehabilitation for children and adults are considered. A comparative analysis of prevailing theories and techniques is made. A combined approach is stressed. PREREQ: SPP 343.

**347 Audiometry (3)** A lecture-laboratory course which explores the measurement of hearing. Opportunities to develop competencies in administering basic measures are provided during lab periods. PREREQ: SPP 343.

**350 Clinical Principles in Speech and Hearing (3)** A study of evaluative and therapeutic materials and methods applicable to the professional setting. PREREQ: SPP 106, 223.

**351 Clinical Practicum (3)** Supervised practice in the Speech and Hearing Clinic. Designed to prepare the student to evaluate and provide therapy for children and adults who have communication problems. Must be repeated if performance is not satisfactory. PREREQ: permission of instructor, and 2.50 average in major (SPP) courses (100-level, 200-level and SPP 350)

**352 Advanced Clinical Practicum (3)** PREREQ: SPP 351 and permission of instructor

**410 Independent Study (1-3)** Research, creative projects, reports, and readings in speech pathology and audiology. Application must be made to advisers by students one semester in advance of registration. Open to juniors and seniors only. PREREQ: approval of department chairperson. Offered upon demand

**411-412 Therapy in the Public Schools (6, 6)** Observation and participation in teaching and activities related to the performance of a clinician's work in the area of speech pathology and audiology. PREREQ: satisfactory completion of all required speech, hearing, and psychology courses through the sixth semester and senior standing. Students must have at least a 2.0 cumulative average and 2.5 average in the major field.

**469 Equipment Workshop (3)** Evaluation, selection, use and maintenance of electronic aids for the speech and hearing clinician Emphasis upon demonstrations and practical experience. Open to speech pathology and audiology students with senior standing. Also offered as SPP 569 for graduate credit.

**470 School Language, Speech, and Hearing Programs (3)** Orientation to and observation of the organization, administration, and operation of school speech and/or hearing programs (K-12). For speech pathology majors with consent of instructor.

**471 Inter-Professional Seminar in Speech and Hearing (3)** Explores the interrelationship between the speech or hearing pathologist and members of allied professions. The course format will include having guest speakers as well as observing specialists in their employment setting. PREREQ: permission of instructor.

**SPP 498 Workshop in Communicative Disorders (3)**

# Comparative Literature Studies

Kostas Myrsiades, *Coordinator*

This program provides a curriculum option for students with an interest in international studies by offering a broad background in European and non-Western culture and literature.

This program is responsive to recent developments in professional business, law, and medical schools which stress admission of students with humanities backgrounds or humanities complements to their scientific or technical backgrounds, and it reflects the growth of professional school programs that include more options in the humanities.

More specifically, this program is designed to answer student requests for a program that supplies a greater breadth of literature than is commonly offered in a language program and a greater variety than that offered in an English department.

**BACHELOR OF ARTS — COMPARATIVE LITERATURE STUDIES**

| | |
|---|---|
| 1. General Requirements | 51 s.h. |
| 2. Foreign Language Requirement | 12 s.h. |
| 3. Related Course Requirements (Second language or minor) | 18 s.h. |
| 4. Cognate Requirements (Courses related to student's major area of concentration.) | 12 s.h. |
| 5. Comparative Literature Core CLS 200, CLS 261, CLS 310, CLS 367, CLS 400 (A grade point average of 2.5 is required for these courses.) | 15 s.h. |
| 6. Comparative Literature Electives Five electives that reflect a variety of genres, periods, traditions, approaches, and theoretical concerns, selected from those listed below. Students wishing to take courses other than those listed below must have the written approval of the Comparative Literature Committee | 15 s.h. |
| 7. Literature in the Original Language Two semester courses in the literature of a language other than English | 6 s.h. |

**COURSE DESCRIPTIONS**

COMPARATIVE LITERATURE STUDIES
Symbol: CLS

**200 Introduction to Comparative Literature (3)** This course focuses on such problems as reception, influence, theme genre, period, and translation through an examination of selected literary works.

**★201 Classical Mythology in the 20th Century (3)** Classical myths and their significance in selected works of literature, film, and art

**205 Computer Applications in the Humanities (3)** This course is designed to provide an introduction to the computer and its applications in a number of humanistic disciplines (literature, history, and writing, but some attention will also be given to foreign languages, linguistics, music, and art )

**★222 Literature of the Western World (3)** Readings representative of the best in the Western literary tradition from Homer to the present, which are illustrative of the best genre types and period pieces. This course can be taken as an alternative to LIT 165

★Approved Distributive Requirement Course

†260 **Continental Literature I (3)** Literature of continental Europe from classical times through the Renaissance.
†261 **Continental Literature II (3)** Literature of continental Europe from Neoclassicism to the present
309 **Literature Translation Workshop (3)** A writing workshop on the theory and practice of literary translation.
310 **Contemporary Literary Criticism (3)** A survey of the major developments in European literary criticism during the 20th century with emphasis on the developments of the last 20 years.
358 **Women in Western Literature (3)** An inquiry reaching back into classical antiquity for some prototypes of women in the literature of the West. Readings from Aeschylus, Sophocles, Aristophanes, Euripides, Ovid, Dante, Petrarch, Shakespeare, Moliere, Austen, Flaubert, James, Tolstoy, Shaw, Cather, Giraudoux, others.
359 **Women in Modern Fiction (3)** Readings, analysis and discussion of works of contemporary fiction which present major depictions of women by authors such as Sarraute, Duras, Böll, Walker, Kundera, Morrison, Woolf, etc.
360 **Literature of Modern China (3)** A survey of the literature of the People's Republic of China
361 **Modern Continental Drama (3)** A consideration of the chief writers who influenced the modern drama: Ibsen, Strindberg, Chekhov, Hauptmann, Pirandello, Sartre, Brecht, and Ionesco.
362 **Modern Continental Fiction (3)** Important modern European writers in translation: Flaubert, Dostoevsky, Unamuno, Gide, Mann, Kafka, Camus, Sartre, and Moravia. Their aesthetic and philosophical contributions to modern fiction.
363 **Soviet and Eastern European Literature (3)** A comparative approach to selected 20th century works of fiction, poetry, and drama
364 **Soviet and Eastern European Film (3)** A critical-analytical approach to Soviet and Eastern European film covering major movements and theory since WWII
367 **Classical Mythology (3)** An examination of Greek mythology through the works of Homer, Hesiod, the Greek tragedians, and Greek lyric poets.
368 **Literature and Myth (3)** The influence of Greek mythology on contemporary Western literature and thought.
369 **Literature and Film (3)** The interrelation between selected works of world fiction and their film adaptations.
400 **Comparative Literature Seminar (3)** Topics announced annually. Required of comparative literature majors in their junior or senior year. May be repeated for credit.
410 **Independent Study in Comparative Literature (3)**
411 **Foreign Study in Comparative Literature (3)**
FLM 304 **Women and Film (3)** An examination of the role of women in contemporary world cinema and of the feminist film
LIT 369 **The Modern Greek Experience (3)** The Greek heritage and its impact on the Greek-American writer and the Greek writer in exile (Petrakis, Gage, Haviaras, Kazantzakis, Cavafy, Seferis, Ritsos).

†Approved two-semester substitute for distributive requirement.

### COMPARATIVE LITERATURE STUDIES

### *RELATED COURSES

| | |
|---|---|
| FLM 200 | Introduction to Film |
| ITA 301 | Introduction to Dante |
| LIT 265 | Literature and Psychology |
| LIT 270 | Literature of the Cities |
| LIT 272 | New Fiction |
| LIT 297 | Themes in Contemporary Literature |
| LIT 364 | Modern Irish Literature |
| LIT 366 | Criticism |
| RUS 310 | Russian Literature in Translation |
| SPA 400 | An Introduction to Cervantes and Don Quixote |

*For course descriptions see English and Foreign Languages. For related courses in departments other than English and Foreign Languages consult the *Handbook for Comparative Literature Studies* available in Main 531.

# Counselor, Secondary, and Professional Education

William J. Rahn, *Chairperson*
Julian M. Swiren, *Assistant Chairperson*
**PROFESSORS:** Buechele, Cleary, Deischer, C. Good, Hsu, G. Thomas, S. Walters.
**ASSOCIATE PROFESSORS:** Gottshall, Holingjak, Kahn, Leeds, Paganelli, Rahn, Silverman, Swiren

The degree of Bachelor of Science in Education, preparing the student for teaching in the secondary schools, may be earned with academic specialization in biology, chemistry, communication, earth and space science, English, French, general science, German, Latin, mathematics, physics, Russian, Spanish, or social studies (which includes concentrations in anthropology, geography, political science, philosophy, psychology, history and sociology). Satisfactory completion of a secondary curriculum will also qualify the student for a Pennsylvania Instructional I Certificate, which is valid for six years of teaching the specified subject in approved secondary schools in Pennsylvania. The student must choose one academic field of specialization.

### BACHELOR OF SCIENCE IN EDUCATION

1. General Requirements — Secondary Education Programs, see pages 30-32. 51 s.h
2. Professional Education Requirements — Secondary Education 30 s.h.
   EDF 100*, EDP 250*, EDM 300*, EDP 351*, EDS 306*, EDS 411-412
   Teaching Skills/Methods*
3. Specialization For Secondary Teaching — See appropriate page for each field of specialization.
   Specialization in one of the teaching fields listed below is required for graduation in secondary education. The minimum semester hours which West Chester requires for each field will satisfy the teacher certification requirements in Pennsylvania. The minimum for each field of specialization noted in the particular B.S. in Education program given is under the heading of the department.

*The student must have at least a grade of "C" in the asterisked courses in order to be admitted to EDS 411-412, Student Teaching. (Also see Student Teaching, page 119.)

**Secondary Areas of Certification**

| | | |
|---|---|---|
| Biology | French | Physics |
| Chemistry | General Science | Russian |
| Communication | German | Social Studies |
| Earth and Space Science | Latin | Spanish |
| English | Mathematics | |

The student following the secondary education program must confer regularly with his or her professional studies advisor in the Department of Counselor, Secondary, and Professional Education, as well as with the academic advisor assigned by his or her respective academic department. The certification of all students whose goal is the Bachelor of Science in Education is the responsibility of the certification officer of the School of Education.

### COURSE DESCRIPTIONS
COUNSELOR EDUCATION
Symbol: EDC

**462 Essentials of the Helping Relationship (3)** This course surveys the concepts and skills involved in helping others through individual interviewing, problem-solving, decision-making, and systematic behavior change.
**498 Counselor Education Workshop (1-3)**
**499 Peer Helper Workshop (1-3)** A workshop which focuses on acquisition of specific knowledge and skills necessary for working in a college setting.

### COURSE DESCRIPTIONS
FOUNDATIONS
Symbol: EDF

**100 School and Society (3)** An introduction to the nature, function, scope, organization, administration and support of the public school in American society. Offered every semester.
**350 The Professional and Student Personnel Services (3)** An introduction to non-adjunctive services in education. PREREQ: EDP 250.
**360 The Learner in Non-School Settings (3)** Emphasis in the course will be placed upon the intra- and interpersonal development, facilitative growth and adjustment and disfunction as they may impact the non-school educator or trainer.
**364 Systems-Based Educational Services (3)** This course introduces the student to general systems (social) theory, focusing upon the elements, dynamics, and operations of a system that must be considered in developing educational activities and programs for that system. The student will learn strategies of systems analysis and intervention through the investigation of such topics as needs assessment, objective based programming, organizational development, and program evaluation
**412 Internship in Non-School Settings (3)** The internship experience is designed for upper level education students who are interested in utilizing and transferring existing discipline and pedagogical skills within non-school settings. A regularly scheduled practicum will be held for all internships.
**498 Workshop in Educational Foundations (3)**

### EDUCATIONAL PSYCHOLOGY
Symbol: EDP

**249 Adolescent Development (3)** Course focuses on the emotional, social, intellectual, moral, physical, and self-concept factors shaping human behavior with emphasis on adolescent behavior. Offered in fall and spring.
**250 Educational Psychology (3)** A study of learning in relation to the physical, social, emotional, and intellectual aspects of personality. Offered every semester.
**351 Evaluation and Measurement (3)** A survey of testing materials and procedures with emphasis upon interpretation and application of results for pupil guidance purposes. PREREQ: EDP 250. Offered every semester.
**467 Group Dynamics (3)** A group process course designed to help a student develop his or her personal effectiveness in a group situation

### SECONDARY EDUCATION
Symbol: EDS

**306 Principles of Teaching and Field Experience in Secondary Education (3)** Methods and strategies of teaching in secondary schools will be the core of the course. Implications of classroom, management and learning and other related problems will be discussed as well as classroom observation in a 9 week field placement. PREREQ: EDF 100. Offered every semester.
**410 Independent Study (1-3)** Special topics or projects initiated by the student which will enable her/him to do extensive and intensive study in an area of secondary education which will sharply increase her/his knowledge of secondary education PREREQ permission of department chairperson
**411-412 Student Teaching (6, 6)** Observation and participation in teaching and all other activities related to the teacher's work in the area of the student's specialization. PREREQ: 96 semester hours including all professional-education courses. Students must have at least a 2.0 cumulative average and a 2.0 average in the major field and at least a grade of "C" in all secondary education and professional education courses. Offered every semester.

### SECONDARY EDUCATION/SPECIAL EDUCATION
Symbol: EDX

**306 Principles of Teaching and Field Experience in Special Education (3)** Methods and strategies of teaching in public education. Implications of classroom management and learning and other related problems will be discussed as well as classroom observation in a 9 week field placement. Offered every semester

## Environmental Education

John Holingjak, *Coordinator*
**Certification Program**

This interdisciplinary program enables teacher-education majors to secure certification to teach environmental education. The course sequences in the program are drawn from existing curricula in the natural sciences, social and behavioral sciences, and health and physical education, and permit students to graduate with dual certification. That is, their teaching certificates will be valid for environmental education as well as for their major area of study. For the additional certification in environmental education, students are required to complete four core courses and two elective courses chosen from one of the following areas of concentration: natural sciences, recreation-centered, man-centered, or curriculum-centered. Students wishing to explore this program should consult with the coordinator of environmental education.

CERTIFICATION PROGRAM

| | |
|---|---|
| 1. Required Core Courses<br>GEO 230, BIO 201*, BIO 172*, EDO 420 | 12 s.h. |
| 2. Electives — two courses from one of these areas: | 6-8 s.h. |

*Biology majors must substitute biology courses from Group A with approval of advisor.

Group A — Natural Sciences
BIO 275, BIO 277, BIO 377, BIO 378, ESS 101, ESS 111, ESS 201, ESS 230
Group B — Human-Centered
GEO 232, ANT 102, ANT 310, ANT 346, GEO 214, SOC 200, SOC 342, GEO 212, GEO 210
Group C — Recreation-Centered
PED 250, PED 367, PED 370, PED 467
Group D — Curriculum-Centered
EDO 405, EDO 410, EDO 411, EDO 415, EDO 425

**COURSE DESCRIPTIONS**
ENVIRONMENTAL EDUCATION
Symbol: EDO

**405 Conservation Education Curriculum (K-12) (3)** Conservation education as it exists in the present school curriculum and ways to integrate conservation into elementary and secondary school disciplines. Characteristics, interrelationships, and uses of our natural resources, problems and policies of industrial management in conservation as they are related to the school curriculum.

**410 Methods in Conservation Education (3)** Basic concepts and practices of conservation and outdoor education and their role in the school program.

**411 Environmental Education Workshop (3)** Each year the workshop is conducted at different geographic locations, such as Alaska and Colorado. A field-centered learning experience, the workshop includes camping trips, studies of flora and fauna, and field investigations. There is interaction with various governmental agencies as well as informal investigations of environmental problems.

**415 History of Conservation (3)** Development of the conservation movement in the U.S. with emphasis on the progressive adaptation of conservation to our changing social and economic order.

**420 Organization and Administration of Outdoor Education (3)** Basic concepts of outdoor education; the role of outdoor education in the school program; the initiation and administration of outdoor education.

**425 Independent Studies in Environmental Education (3)** Special research projects, reports, readings in conservation and outdoor education. Open to seniors only. PREREQ: permission of instructor.

**498 Workshop in Environmental Education (3)**

# Criminal Justice

Saul H. Greenberg, *Chairperson*
**ASSOCIATE PROFESSORS:** Greenberg, Metz, Patterson
**ASSISTANT PROFESSORS:** Nealy, Nestlerode

West Chester's criminal justice curriculum is a broadbased interdisciplinary program combining theoretical concepts with practical aspects. It has been designed to fulfill the needs of three categories of students:

1. Those who wish to undertake a four-year program of study to prepare for careers in criminal justice.
2. Graduates of two-year colleges who desire to continue their education and obtain the bachelor's degree.
3. In-service personnel who would like to increase their professional competence by strengthening their educational background.

The program provides the competencies, understanding, and philosophy necessary for professional performance in the various fields of criminal justice. It is not designed to develop specialists in any one specific area, however, students may: 1) choose an associate degree in criminal justice, 2) develop areas of special interest through the selection of electives, 3) choose a minor program from complementary disciplines. The successful student should master and retain career skills immediately useful in the criminal justice system, as well as possess the overall intellectual grasp of the situation where those skills would be appropriate.

An important feature of the program is the one-semester internship served at a criminal justice agency. Designed to give personal, direct experience, it affords the student the chance to put his or her theoretical knowledge to work.

**BACHELOR OF SCIENCE — CRIMINAL JUSTICE**

| | |
|---|---|
| 1. General Requirements | 51 s.h. |
| 2. Required Courses<br>CRJ 100, 200, 300, 400 | 12 s.h. |
| 3. Criminal Justice Electives | 21 s.h. |
| 4 Practicum (Internship)<br>CRJ 490 | 12 s.h. |
| 5. Related Areas, Minor or Electives taken under advisement | 30 s.h. |

Enrollment in CRJ 100 and 200 is open to all students. However, enrollment in other criminal justice courses may be limited to criminal justice majors and to other students approved by the department.

**MINOR — CRIMINAL JUSTICE**

| | |
|---|---|
| 1 Required Courses<br>CRJ 100, 200, 300, 400 | 12 s.h. |
| 2. Criminal Justice Electives | 6 s.h. |
| TOTAL | 18 s.h. |

This minor may be taken as a concentration by students in the Associate of Arts in Liberal Studies degree program.

## COURSE DESCRIPTIONS
### CRIMINAL JUSTICE
Symbol: CRJ

**100 History and Philosophy of Law and Justice (3)** This course is intended to: (1) aid the beginning student in understanding the historical and philosophical influences upon the American criminal justice system, (2) introduce the student to a broad range of individuals, who over a period of 2,000 years have made significant contributions to the formulation and process of justice; and (3) examine and analyze various other systems of criminal justice found in divergent and dissimilar cultures.

**200 Introduction to the Criminal Justice System (3)** A course designed to describe the criminal justice system from arrest through trial, appeal, sentencing, correction, and parole. The object of this course is to provide the student with a procedural framework of the criminal process

**214 Organized Crime (3)** Organized crime is examined as an American phenomenon, then compared to organized criminal activity in Europe and Asia. The student will place in perspective the current organizations in the U.S. and their historical development here over the last century. European groupings are examined as precursors/models of U.S. transplants with insights into the proliferation of such groups in the Far East over time and geography.

**220 Corrections (3)** The purpose of this course is to provide the student with a survey and analysis of the correctional system and its processes, both a historical and geographical perspective. Emphasis will be placed on relating this survey and analysis to contemporary practice and future trends within the area of corrections.

**230 Probation and Parole (3)** The intent of this course is to provide the student with an introduction to, and survey of, probation and parole practices from a historical perspective. Assumptions and theories about human behavior, upon which such practices are based, and contemporary and future trends in the field will also be examined

**250 Scientific Crime Detection (3)** This course will engender an appreciation of what is entailed for an individual to understand current scientific methods in the criminal justice system

**255 Criminalistics (3)** To familiarize the student with the recognition of physical evidence, and its collection and processing at the criminalistics laboratory. Course enrollment is limited.

**300 Criminal Law (3)** This course will cover the principles of criminal responsibility, the purposes and limitations of criminal law, and the elements of various criminal offenses. Substantive criminal law will cover the conduct, acts, and omissions which have been designated as crimes. These acts (or omissions) plus the mental state and other essential elements that form the necessary ingredients that make up criminal action will be examined

**310 Juvenile Justice Administration (3)** A survey of both the formal (police/courts/corrections) and the informal (diversion) means of dealing with the problem of juvenile crime. Emphasis is not on the behavior but on society's response to it. Emphasis will also be placed on the legal rights of juveniles.

**312 White Collar Crime (3)** This course analyzes the usually nonviolent criminal conduct described as official corruption, systematic crime, or violations of trust, that is characterized by calculation, deceit, and personal enrichment. The influence of organized crime is also explored

**330 Criminal Behavior (3)** This course is intended to expose students to broad, theoretical positions on crime and to observable criminal offenses. Students will learn to avoid oversimplified, dogmatic answers. Research findings on understanding and controlling crime will be discussed. The course will help a student appreciate the need to integrate contemporary psychology into an understanding of criminal behavior.

**340 Victimless Crimes (3)** This course is designed to familiarize the student with the ramifications of vice control. It will cover such topics as prostitution, homosexuality, pornography, gambling, and bookmaking, as well as historical perspectives, statutes and interpretations, a comparison of illegal operations, enforcement techniques, and legalization efforts.

**368 Industrial Security (3)** General definition of the field of "industrial security" with emphasis on loss prevention and protection of assets. Identification of vulnerabilities in business and industry, and specific techniques and approaches for resolving or minimizing such problems.

**369 Retail Security (3)** An in-depth examination of the various facets and interests of the retail sector of our society. A review and discussion will be undertaken of security management, including selection of personnel, training, budgeting, public relations, employee relations, and their interface with safety and fire protection

**400 Criminal Procedure (3)** This course is an examination of the theory and application of the law and rules of evidence for the criminal justice student. It will develop an understanding of the reasons for the rules of evidence and a grasp of the application of the rules in case investigation and for presentation in court through a study of selected cases, statutes, and the analysis of hypothetical cases and situations.

**410 Independent Studies in Criminal Justice (1-3)** Research projects, reports, and readings in criminal justice. Permission of department chairperson.

**420 Criminal Investigations (3)** Criminal investigation functions of police involving crimes of violence, crimes against property and organized crime. Police operational techniques, and applicable court decisions, in the areas of interview, search, seizure, and arrest.

**430 Interviewing and Counseling the Offender (3)** Techniques of interviewing and counseling applicable to law enforcement and corrections officers. Areas of study include: the initial interview, interrogation, handling the informer, manipulative behavior of offenders, and exit interviews. Role playing and sociodrama are used

**432 Correctional Law (3)** A course designed to provide those involved in the correctional process with a basic introduction into the emerging field of law in this area. It encourages understanding of rights and responsibilities of the incarcerated offender and of the administrative staff.

**435 Assessment of the Offender (3)** This course will develop students' abilities to describe, recognize, and understand, psychometric measures on adult and juvenile offenders. Topics include: understanding the selection of psychometric measurements, observing and drawing from life histories, understanding how we are trying to predict violent behavior.

**440 Violent Crime (3)** This course seeks to survey the incidence of violent crime, to analyze the violent criminal, and to study the variety of means that have been developed to control criminal violence.

**470 Interpersonal Relations (3)** This course is designed to aid a student in recognizing changes which have affected him or her and led to the behavior currently exhibited. To recognize how self-understanding leads to understanding relationships with others. The knowledge gained assists the student in relating to other persons in their personal, social, and vocational life.

**480 Municipal Police Administration (3)** This course stresses hands-on management to contend with the conflicting forces of budget, morale, productivity, integrity and social justice specific to local police. Undergraduate students must have completed CRJ 490.

**487 Ethical Issues in Criminal Justice (3)** This course is designed to identify and examine ethical issues among practitioners and students in the criminal justice field. Such issues may include: the discretionary power of arrest, the use of deadly force, the decision to prosecute, participation in plea bargaining, representation of the guilty, and the imposition of punishment. Such a course will promote inquiry that combines ethical analysis with a practical awareness of the realities of the criminal justice system.

**490 Practicum (12)** Independent study based on a vocational placement in a criminal justice agency; police, courts, defense, or corrections. The design of each placement depends on the student's previous experience and area of interest. Written biweekly reports and a major paper are required. For seniors only.

**496 Criminal Justice Planning (3)** This course is intended to aid in the instruction of undergraduate students who are potential candidates for future planning, evaluation or administrative positions. Given the newness of criminal justice planning, this course represents a beginning effort at a comprehensive discussion and review of justice system planning and evaluation

# Economics

Daniel Mohan, *Chairperson*
**PROFESSOR:** Sylvester
**ASSOCIATE PROFESSORS:** Bove, DeMoss, Mohan, T. Naggar
**ASSISTANT PROFESSORS:** Dunleavy, Fiorentino

The primary objective of the Department of Economics is to provide a learning system that will permit each student to achieve the maximum potential intellectual development in his or her chosen area of study, and to prepare for a satisfying career in that field.

As an aid to the achievement of this purpose, the Department of Economics strives:

(1) To assist students to acquire a fundamental knowledge and understanding of the framework within which our business and industrial system operates;
(2) To acquaint students with the modern techniques used by business and industry to enable them to deal effectively with the changing environment;
(3) To encourage students to develop the ability to analyze situations, to relate and classify pertinent factors, and to derive alternatives for solving problems.

The Department of Economics coordinates its courses with the Department of Accounting and the Department of Business Administration.

Majors in the department must consult the departmental handbook and their advisor annually for current requirements.

Three degree programs are offered:

1. The B.S. in ECONOMICS focuses on a business orientation of economic analysis.
2. The B.S. in GENERAL BUSINESS provides a broad focus to business decision-making.
3. The B.A. in ECONOMICS provides a societal orientation to economic analysis.

Bachelor of Science students are admitted and advised as general business majors until 64 undergraduate credits are completed. Thereafter, students may continue in general business or may concentrate in accounting, economics, management or marketing if they have met departmental requirements.

### BACHELOR OF SCIENCE — ECONOMICS

| | |
|---|---|
| 1. General Requirements (Includes ECO 112* See appropriate curriculum guidance sheet) (See pages 30-32) | 51 s.h. |
| 2. Business and Economics Core<br>ECO 112*, ACC 201*-202*, BLA 201*, ECO 251-252, MKT 301*, MGT 301*, FIN 325, MKT 327, MGT 303, ECO 335, MGT 405<br>(*A minimum grade of C must be attained in each of these courses.) | 39 s.h. |
| 3. Other courses required by the Business Program: CSC 101, MAT 107. These courses satisfy and are included under general requirements. | |
| 4. Other course required — MAT 108 | 3 s.h. |
| 5. Economics Major — ECO 340, 348 and three additional 300 level or above courses offered by the department. | 15 s.h. |
| 6. Economics or Business Electives | 9 s.h. |
| 7. Free Electives | 12 s.h. |

### BACHELOR OF SCIENCE — GENERAL BUSINESS

Choose 15 credit hours of 300-400 level courses from three of the following areas: Accounting, Economics/Finance, Management, Marketing

### BACHELOR OF ARTS — ECONOMICS

| | |
|---|---|
| 1. General Requirements<br>See pages 30-32. | 51 s.h. |
| 2. Foreign Language Requirement | 0-15 s.h. |
| 3. Social Science Electives | 9 s.h. |
| 4. Economics Major Requirement<br>ECO 111-112, 340, MAT 107-8, ECO 335, 348, 251-2<br>Additional Departmental Courses | 36 s.h. |
| 5. Electives (6 s.h. of electives may be economics courses)<br>See department advisor. | 5-20 s.h. |

### ECONOMICS MINOR

Students may minor in economics. Course requirements are ECO 111, 112, 340, 348, plus two economics electives selected under departmental advisement.

### COURSE DESCRIPTIONS

ECONOMICS
Symbol: ECO

★ **101 Principles of Economics — Survey (3)** Basic principles underlying production and consumption activities in our modified capitalistic economic system, from the aggregate as well as individual and sectoral standpoints. Issues include competition, unemployment, inflation, economic growth, and alternative systems.

† **111 Principles of Economics I (Macro) (3)** National income and its measurement. The determination of price levels, output, and employment. Money and credit, expenditures, and economic stability. Government fiscal and monetary policy. PREREQ: Working knowledge of high school mathematics is required

† **112 Principles of Economics II (Micro) (3)** Principles underlying use and allocation of scarce productive resources. Consumption and production activities. Value, price, and income distribution. Considerations of economic efficiency and welfare. PREREQ: Working knowledge of high school mathematics and ECO 101 or 111.

**251 Quantitative Business Analysis I (3)** Considers the fundamental ideas of statisical theory that are appropriate for solving problems in the fields of business and economics. Topics include: descriptive statistics, probability theory, sampling and estimation, hypothesis testing. PREREQ: MAT 107.

**252 Quantitative Business Analysis II (3)** Continuation of ECO 251. Topics include hypothesis testing, simple multiple regression analysis, and Bayesian inference. PREREQ: ECO 251 and MAT 108.

**303 Economic Role of Women (3)** Statistical

★ Approved Distributive Requirement Course.
† ECO 111-112 Approved two-semester substitute for distributive requirement

information pertaining to one of the most important changes in American economy in this century, the increase in the number of working women. Job related aspects such as the historical pattern, labor force participation, education, earnings, labor supply, sex discrimination PREREQ: Junior level standing or instructor's approval

**333 Consumer Economics (3)** Major kinds of economic decisions required of consumers, an evaluation of the social and economic consequences of those decisions.

**334 Labor Economics (3)** Application of economic theory to the operation of labor markets and the collective bargaining process. Consideration is given to the development of the labor movement and public policy toward labor and employment. PREREQ ECO 112.

**335 Money and Banking (3)** A survey of money, credit and prices, emphasizing their effects on economic stability. The Federal Reserve System and its effect on credit control. PREREQ. ECO 112.

**336 Regulation of Competition (3)** Background and development of public policies which directly modify the free enterprise economy of the United States. Evaluation of policies which change the nature and extent of competition. PREREQ ECO 112

**337 Economic Growth and Development (3)** A survey and critical evaluation of alternative theories of capitalist economic development. Analysis and comparison of alternative public policies applicable to underdeveloped countries and regions PREREQ ECO 112.

**338 International Economics (3)** A descriptive, analytical examination of international trade, financial, and other economic relationships. The effects of public policies on these relationships PREREQ. ECO 112

**340 Intermediate Microeconomics (3)** A continuation and extension of the price-system analysis in ECO 112. Emphasis on the need for efficiency in the economy's use of scarce productive resources. PREREQ: ECO 112 and MAT 108

**341 Public Finance (3)** Government's influence on stability of national income. Nature of taxes and expenditures at the various levels of government and their effect on the allocation of resources and the distribution of income. PREREQ. ECO 112.

**343 Comparative Economic Systems (3)** Basic ideas and economic institutions of socialism, communism, and capitalism in the twentieth century: problems created by the emergence of competing systems. PREREQ. ECO 111, and 112.

**345 History of Economic Thought (3)** Origins of economic thought and comparison of the major schools of economic doctrine. Current economic and socio-political factors. PREREQ: ECO 112.

**347 Managerial Economics (3)** A course which seeks to develop managerial judgment The premise is that technical application, to be successful, must proceed from economic feasibility. One plan is weighed against another in terms of comparative costs and revenues, return on investment, plant-replacement problems, obsolescence, and depreciation. PREREQ: ECO 112 and 252, ACC 202 and MAT 108.

**348 Intermediate Macroeconomics (3)** Introduction to the theory of income, employment, and growth Provides the tools to analysis necessary for dealing with aggregate economic problems. PREREQ: ECO 112 and MAT 108.

**350 Urban Economics (3)** Economic aspects of such urban problems as poverty, housing, taxation, income distribution, and discrimination. Analysis of economic aspects of various proposed remedies, including urban renewal, family allowances, cooperatives, and others. PREREQ. ECO 112

**401 Introduction to Econometrics (3)** Statistical and mathematical techniques applied to economic situations. Use of empirical data in economic analysis. PREREQ: ECO 112 and 252 and MAT 108.

**410 Independent Studies in Economics (1-3)** Special research projects, reports, readings in economics Open to seniors only. PREREQ Instructor's approval

### FINANCE
Symbol: FIN

**325 Corporation Finance (3)** The organization and financing of the modern corporation Promotion, capitalization, short-term financing, capital budgeting, distribution of earnings, expansion, consolidation, failure, and reorganization PREREQ: ECO 112 and 251, and ACC 202.

**330 Principles of Insurance (3)** The nature and types of risk management and insurance coverage are considered. Conceptual analysis and the impact of financial deregulation on personal and business risk management and insurance are covered. PREREQ: ECO 112 or instructor's approval.

**332 Real Estate Finance (3)** This course provides a basic orientation to the financial instruments and institutional structures and policies of real estate finance. PREREQ: ECO 112 or instructor's approval.

**344 Investments (3)** Problems and procedures of investment management; types of investment risks; security analysis; investment problems of the individual as well as the corporation PREREQ: ECO 112 and 251, and ACC 202.

**370 Problems in Financial Management (3)** Case problems in corporate financial management. Includes cases on management of current assets, obtaining short term loans, raising long term capital, capital budgeting, and divided policy PREREQ: FIN 325.

### BUSINESS INTERNSHIP
Symbol: BUS

**400 Business Internship (3-15)** The business internship for students in accounting, business, and economics enhances the student's educational experience by providing a substantive work experience in the business world. PREREQ: Internship program coordinator's approval

# English

Kostas Myrsiades, *Chairperson*

**PROFESSORS:** Brooks, Browne, Falgie, Gaunt, Green, Kent, McGrath, McKenty, Markow, Myrsiades, Oldsey, Taylor, Weiss, West, Ziegler

**ASSOCIATE PROFESSORS:** Fordyce, Hunsberger, Kelleher, Kelly, McCawley, Page, Prater, Smith, Trotman, Ward, Wise

**ASSISTANT PROFESSORS:** Combs, Echewa, Fox, Larsen, Peich, Rimel, Sabol, Scheffler, Shloss

The Department of English offers three degree programs: the Bachelor of Arts in literature, the Bachelor of Arts in comparative literature in cooperation with the Foreign Languages Department, and, in cooperation with the School of Education, the Bachelor of Science in Education. Each program is planned in consultation with an advisor.

1. The B.A. in LITERATURE provides a broad foundation in literature and an introduction to writing and the study of language. The wide choice of electives permits the student to structure a program compatible with his/her particular career goals and interests, such as graduate studies, law school, journalism, radio and television broadcasting, publishing, or advertising.
2. The B.A. in COMPARATIVE LITERATURE provides a curriculum option for students with an interest in international studies by offering a broad background in European and non-Western culture and literature. See Comparative Literature Studies on pp. 59–60.
3. The B.S. in EDUCATION—ENGLISH prepares the student to teach English in the secondary schools of Pennsylvania under an Instructional I Certificate. Before permission to student teach is granted, students in this program must (1) satisfy the prerequisites for student teaching listed on page 119 and (2) satisfy specific English Department requirements outlined in the *Handbook for English Majors.*

## REQUIREMENTS COMMON TO THE B.A./B.S. Ed. PROGRAMS

| | |
|---|---|
| 1. General Requirements, see pp. 30-32 | 44-51 s.h. |
| 2. Cognate Course (History) | 3 s.h. |

## BACHELOR OF ARTS — LITERATURE

| | |
|---|---|
| 1. Language Requirement | 3 s.h. |
| 2. Departmental Requirement<br>ENG 230, CLS 260, CLS 261 (or one Group D course)*,<br>LIT 200 (or one Group C course in appropriate period), LIT 201 (or one Group C course in appropriate period), LIT 230 (or one Group A course), LIT 231 (or one Group B course), one advanced writing course, LIT 400 | 27 s.h. |
| 3. Departmental Electives | 12 s.h. |
| 4. Professional Electives or Minor (optional) | 0-15 s.h. |
| 5. Additional Free Electives to complete | 128 s.h. |

## BACHELOR OF SCIENCE IN EDUCATION — ENGLISH

| | |
|---|---|
| 1. Professional Education Requirements, see p. 60 | 30 s.h. |
| 2. Departmental Requirements<br>CLS 260, ENG 230, ENG 331, ENG 335, LIT 200 or LIT 201, LIT 230 or LIT 231, one course from Group A, B, C, or D*, one advanced writing course, LIT 400 | 27 s.h. |
| 3. Departmental Electives<br>Selected under advisement from LIT groups A-E and approved English and Humanities courses. Consult *Handbook for English Majors* | 9 s.h. |
| 4. Additional electives to complete | 128 s.h. |

*Consult *Handbook for English Majors*

## MINOR PROGRAMS

Students may minor in any of the four following programs. Elective courses are selected in consultation with the student's minor advisor. Any one of these minors may be taken as a concentration by students in the program leading to an Associate of Arts in Liberal Studies.

**Literature Minor**

| | |
|---|---|
| 1. Required Courses<br>LIT 200 or LIT 201, LIT 230 or LIT 231 | 6 s.h |
| 2. Elective Courses<br>1 American Literature and 1 English Literature (for different periods than in 1.), any *two* other LIT courses | 12 s.h. |

**Writing Minor**

| | |
|---|---|
| 1 Required Course<br>ENG 201 | 3 s.h. |
| 2. Elective Courses<br>Any *four* coures selected from the following:<br>ENG 202, 203, 301, 302, 303, 304, 400, 490, 491 | 12 s.h. |

**Film Criticism Minor**

| | |
|---|---|
| 1. Required Courses<br>FLM 200, two other FLM courses | 9 s.h. |
| 2. Elective Courses<br>Any *three* courses selected from the following:<br>FLM 201, 300, 301, 302, 303; JRN 200; ENG 302; SPC 117, 202, 217, 220, 317 | 9 s.h. |

**Journalism Minor**

| | |
|---|---|
| 1. Required Courses<br>JRN 200, JRN 225, JRN 226, JRN 250, and an additional three credit hours are to be earned either through a supervised internship in the communications area or through a practicum based on one semester's active service on the University's student newspaper. | 15 s.h. |
| 2. Elective Course<br>One of the following: JRN 315, JRN 335, JRN 355 | 3 s.h. |

## COURSE DESCRIPTIONS

ENGLISH
Symbol: ENG

**000 Basic Writing (3)** A preparatory course of study which emphasizes the basic grammatical, logical and rhetorical skills that produce effective paragraphs. *This course is a prerequisite to ENG 120 for those who do not demonstrate equivalent competence. Credits earned in 0-level courses do not count towards the 128 hours of credit needed for graduation.*

**030 English for Non-Native Speakers (3)** Individualized instruction for the non-native speaker; conversational English, formal written English, reading and listening comprehension, and grammar. See note under ENG 000

**120 Effective Writing I (3)** An intensive course in writing which emphasizes skill in organization and awareness of styles of writing and levels of usage as ways of expressing and communicating experience.

**121 Effective Writing II (3)** Continues the expository writing experience offered in Effective Writing I, and explores techniques of gathering, evaluating, and selecting materials to be used in writing research papers.

**122 Effective Writing II (3)** An introduction to research techniques for political science majors, emphasizing problem formulation, descriptive and casual analysis, documentary research, questionnaire survey, statistical analysis, and interview

**123 Seminar in Exposition (3)** For English and communication majors. Extensive practice in basic expository and argumentative writing skills, with emphasis on language awareness.

**125 Writing for English and Communication Majors (3)** Introduces rhetorical modes and strategies of expository and argumentative writing, especially as applicable to the analysis of literature, requires a research paper on a literary topic. Taken in place of ENG 121 by English and communications majors

**130 Effective Writing I for Non-Native Speakers (3)** An intensive course in writing for the non-native speaker of English which emphasizes skill in organization and awareness of styles of writing and levels of usage as ways of expressing and communicating experience. *For non-native speakers of English.*

**131 Effective Writing II for Non-Native Speakers (3)** Continues the expository writing experience offered to non-native speakers in English 130, and explores techniques of gathering, evaluating, and selecting materials to be used in writing research papers. *For non-native speakers of English*

**200 Writing Improvement (1, 2 or 3)** Intensive instruction to aid students experiencing serious difficulties with their writing assignments in other courses. Not open to freshmen. Pass/Fail only

**201 Advanced Writing (3)** Frequent practice in expository, descriptive, narrative, and argumentative techniques, with emphasis on style. Writing is criticized and corrected in private sessions.

**202-203 Creative Writing I-II (3) (3)** Writing experience in the crafts of fiction, poetry, and drama

**204 Practical Prose Composition (3)** Writing in various modes that authentically mirror real situations in everyday life including the world of work

**205 Writing from Experience (3)** Exploration of personal history and attitudes through carefully structured composition tasks of autobiographical narrative memoir and introspective analysis

**230 (Also LIN 230) Introduction to Linguistics (3)** Basic concepts of language description, classification, change, reconstruction, dialectology, and sociolinguistics. (Prerequisite for all courses in English language.)

**275 Literary Editing and Publishing (3)** Experience in publishing the student literary magazine *Daedalus*: editing, proofing, photographic selection and layout, printing.

**301 Poetry Workshop (3)** The theory and practice of poetry; exploration of verse forms, prosody, metrics; practice in critical and interpretive analysis of poems written by fellow students and professional poets. The poem as a product of skilled craftsmanship.

**302 Drama Workshop (3)** Writing the play: possibilities and limitations of the stage. Attention to sets and costuming where relevant. Characterization by action and dialogue. Problems of establishing motivation. The play's totality in theme, character and action. Informal readings of student work.
**303 Short Story Workshop (3)** Crafting the modern short story with reference to American and British models. The significance of setting, atmosphere, characterization, and theme. Discussion and some exploitation of experimental ideas in the genre.
**304 Essay Workshop (3)** Practice in writing the essay. Conventions and techniques of this literary form as it appears in commercial and quality magazines.
**320 Writing in the Professions (3)** Introduction to document analysis and production, the review process, empirical evaluation, and design principles.
**330 English Phonology (3)** Phonemics and morphophonemics in English. Writing systems and phonemic-graphemic relationships in English. Historical development of English sounds. PREREQ: ENG 230.
**331 Structure of Modern English (3)** A detailed analysis of the modern descriptive approach to the study of English grammar and how it compares with the traditional approach. PREREQ: ENG 230.
**335 History of the English Language (3)** Review of the influences on the development of the English language. PREREQ: ENG 230.
**339 History and Dialects of American English (3)** Development of the English language in America since colonial settlement. American and British English. Pronunciation, vocabulary, and grammar of the regional and social dialects of American English. PREREQ: ENG 230.
**340 Sociolinguistic Aspects of English (3)** The study of language in its social context; the ethnography of communication; language and society, social classes, ethnic groups, politics, sex, and education. PREREQ: ENG 230.
**350 Introduction to English as a Second Language (3)** Exploration of the scope of the field, types of programs, general approaches to instruction.
**368 Organizational Writing (3)** The nature of communication within organizations. Theoretical basis and practical application.
**371 Technical Writing (3)** Instruction in the forms and techniques of written, oral, and visual communication currently practiced in the scientific and technical professions. A series of coordinated assignments leads to a final report on a project in the student's field of professional study. PREREQ: ENG 121.
**390 Teaching English in Secondary Schools (3)** Review of language-arts requirements in secondary schools. Special reference to grade-placement with adoption of materials, appraisal of results, and development of programs of study. PREREQ: ENG 331, 335, EDM 300, EDP 351, EDS 306.
**395 Internship (3-12)** Intensive practical experience with selected businesses, media, and public agencies. Limited to qualified students who have earned a minimum of 80 credit hours. See *Handbook for English Majors* for specific requirements.
**400 Writing Seminar (3)** Special topics to be announced such as Fantasy and Science Fiction, Longer Prose Works, or The Anti-Story.
**410 Independent Study (3)**
**420 Report and Proposal Writing (3)** Working in writing groups and individually, students complete proposal and report writing projects that respond to organizational needs and criteria. They learn to conceptualize research problems and plan, organize, and design major projects. PREREQ: ENG 368, 371, or graduate status.
**430 Language Seminar (3)** Studies in English language and linguistics. PREREQ: ENG 230 and at least junior standing.
**490-491 Writing Seminar in the Novel I-II (3) (3)** A course in the writing and preparing of book-length manuscripts (novel, novella, "non-fictional" novel) with the intention of submission for publication. Also includes coverage of fictional aspects and techniques used in writing memoirs, biography, current history.

## LITERATURE
Symbol: LIT

**101 Great American Writers (3)** Major American writers from Franklin to Faulkner. Not open to English majors.
**★ 165 Introduction to Literature (3)** A course designed to develop awareness of literature as being central to all the arts, to increase level of literacy and critical faculties; and to broaden understanding of the human condition. PREREQ: ENG 120 or permission of the department. (CLS 222 is an approved substitute for LIT 165.)
**166 Science Fiction (3)** A critical study of the science fiction novel focusing on the works of contemporary writers such as C.S. Lewis, Asimov, Heinlein, Zalazny, Niven, Anthony, Herbert, LeGuin, and Delaney. (Group E)
**200 American Literature I (3)** Survey of representative American writers from Colonial times to 1860, including Bradstreet, Taylor, Franklin, Poe, Thoreau, Hawthorne, and Melville.
**201 American Literature II (3)** A survey of representative American writers from 1860 to the present, including Whitman, Twain, James, Crane, Eliot, Frost, Hemingway, and Faulkner.
**202 Afro-American Literature I (3)** Survey of Afro-American authors from the antebellum era through the first quarter of the 20th century. (Group C)
**203 Afro-American Literature II (3)** Continuation of LIT 202. Second quarter of the 20th century to the present. (Group C)
**230 English Literature I (3)** A survey of English literature from Anglo-Saxon writing through the 18th century.
**231 English Literature II (3)** A survey of English literature of the 19th and 20th centuries.
**265 Literature and Psychology (3)** An examination of the relationships between literature and psychology, and readings from drama (Shakespeare, Ibsen, Albee), poetry (Poe, Browning, Eliot), and fiction (Tolstoy, Joyce, Woolf, Mann, Kafka, Faulkner). (Group E)
**269 The Literature of Roguery (3)** A historical study of the rogue in fiction with emphasis on the satiric view of society. Among writers studied Defoe, Thackeray, Donleavey, and Kerouac. (Group E)
**★ 270 Urbanism and Modern Imagination (3)** Covers a variety of responses of contemporary writers, artists, and planners to the rise of the modern city. (Group E)

★ Approved Distributive Requirement Course
★ LIT 270 Approved Interdisciplinary Course

**272 New Fiction (3)** Fiction published in the last ten years. (Group E)
**274 Feminist Poetry (3)** A study of poetry espousing the feminist cause and exploring the feminist response. Techniques and attitudes of such poets as Plath, Sexton, Rich, Morgan, Wakoski, and Kumin. (Group E)
**297 Themes in Contemporary Literature (3)** Literary topic or theme in contemporary American, English or world literature to be announced each time the course is offered. (Group E)
**302 Development of the American Novel (3)** Beginnings of the American novel to Frank Norris. (Group C)
**303 Introduction to Multi-Ethnic American Literature (3)** American ethnic, racial, and national groups in American literature and the contributions of creative literary artists representing these cultures.
**304 American Jewish Novel (3)** A study of major American Jewish novelists: Cahan, Singer, Roth, Potok, Bellow, Malamud, Wallant, and Wiesel. No knowledge of Yiddish or Hebrew necessary.
**305 Modern American Drama (3)** American drama from the early 1900's to the present, with emphasis on the development of the American Theater as seen in such major dramatists as O'Neill, Odets, Wilder, Miller, Williams, and Albee. (Group C)
**306 Modern American Novel (3)** The novel in America from Dreiser to the present. (Group C)
**307 Modern American Poetry (3)** Major 20th-century American poets. (Group C)
**335 Shakespeare I (3)** Reading, analysis, and discussion of selected histories and tragedies. Discussion of critical approaches to the plays and of appropriate historical and intellectual backgrounds.
**336 Shakespeare II (3)** Reading, analysis and discussion of selected comedies and non-dramatic poems. Discussion of critical approaches to the works and of appropriate historical and intellectual background. Either LIT 335 or 336 may be taken first.
**337 Literature of the Enlightenment (3)** A critical consideration of the 18th-century writers, exclusive of the dramatists. (Group B)
**338 Restoration and 18th Century Drama (3)** The drama from the reopening of the theaters in 1660 to 1800. (Group B)
**339 18th-Century British Novel (3)** The British novel from Defoe to Austen. (Group B)
**340 The Romantic Movement (3)** Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries in the light of social background and critical doctrine. (Group B)
**341 19th Century British Novel (3)** The British novel from Austin to Hardy. (Group B)
**342 Victorian Literature (3)** Victorian thought and culture in poetry and non-fiction prose. (Group B)
**343 Modern British Drama (3)** British drama from Wilde to the present, with emphasis on the rebirth of the British drama and its major writers. (Group B)
**344 Modern British Novel (3)** The novel in England from Conrad to the present. (Group B)
**345 Modern British Poetry (3)** Major 20th-century British poets. (Group B)
**352 Literature for Young Children (3)** A critical study of the literature of young children for prospective specialists in early childhood.
**364 Modern Irish Literature (3)** Major literary writers of Ireland from 1840 to the present. George

Moore, Synge, Yeats, Joyce, Shaw, O'Casey, Beckett, Behan, and Seamus Heaney. (Group B)
**365 Short Fiction (3)** Analysis and intepretation of short fiction. (Group E)
**366 Criticism (3)** A study of the theories of classical antiquity, England, and the United States, with emphasis on the relevance of these theories to English and American literature of the moment (Group E)
**369 The Modern Greek Experience (3)** The Greek heritage and its impact on the Greek-American writer and the Greek writer in exile (Petrakis, Gage, Haviaras, Kazantzakis, Cavafy, Seferis, Ritsos).
**395 Children's Literature (3)** A critical study of literature for children, setting standards for evaluation and appreciation
**400 Literature Seminar (3)** Required for English majors in the junior or senior year May be repeated for credit Topics offered periodically: Beckett/Joyce, Byron, Dickens, Donne, Fitzgerald, Shaw, Greek Comedy, Greek Tragedy, Hawthorne, Homer, Resistance Poetry, Shakespeare's Major Tragedies, Thomas Hardy
**430 Old English Language and Literature (3)** An introductory study of the language (450-1150 A D.) through a reading of religious and secular poetry and prose. (Group A)
**431 Middle English Language and Literature (3)** An introductory study of the language (1150-1450 A D.) through a reading of selected literary texts. (Group A)
**432 English Drama to 1642 (3)** English drama from the early liturgical tropes to 1642, exclusive of Shakespeare. (Group A)
**434 Renaissance Poetry and Prose (3)** Poetry and prose of the 16th and early 17th centuries. (Group A)
**435 Chaucer (3)** An interpretation of *Canterbury Tales* and *Troilus and Criseyde*. (Group A)
**437 Spenser (3)** A study of the *The Faerie Queene* and shorter poems. (Group A)
**440 Milton (3)** A survey of the major poetry and prose works. (Group A)

The English department accepts certain humanities courses as major electives. Consult the *Handbook for English Majors* for a list of approved humanities courses.

### JOURNALISM
Symbol: JRN

**200 Communications Media (3)** An introduction to the media of communications emphasizing the development and characteristics of print and electronic media forms and their impact on American society.
**225 Newswriting (3)** A course designed to develop proficiency in the writing of news stories for daily and weekly newspapers. News values, the structure and style of news, and the preparation of copy in accordance with professional standards will be stressed
**226 News Reporting (3)** Instruction and practice in basic news reporting techniques coupled with an introduction to newspaper feature writing. Outside assignments will include coverage of speeches, local government meetings and the courts. PREREQ: JRN 225 or equivalent.
**250 News Editing (3)** A course designed to acquaint students with the skills involved in the preparation of copy for publication in newspapers and magazines. Instruction and practice in the mechanics of copy editing, headline writing, layout and photo editing. PREREQ: JRN 225 or equivalent
**315 Magazine Article Writing (3)** Practical instruction in the skills required for successful freelance magazine writing, with emphasis on research, interviewing, writing techniques and marketing. Students will write and submit for publication short features and a full-length magazine article. PREREQ: JRN 225 or equivalent.
**325 History of Journalism (3)** An historical survey of the American press from Colonial times to the present, with special emphasis on the continuing struggle for press freedom and the new journalistic environment created by the emergence of mass media.
**355 Public Relations Principles (3)** An introduction to the role of the public relations practitioner in the formation of public opinion. Communications theory will be combined with specific techniques for working with the press, producing printed material and conducting special events. PREREQ: JRN 225 or equivalent.
**411 Journalism Practicum (3)** One semester of supervised experience as a member of the editorial staff of the University's student newspaper See journalism coordinator for specific requirements. PREREQ: JRN 225 *and* either JRN 226 or JRN 250.

### FILM THEORY AND CRITICISM
Symbol: FLM

**200 Introduction to Film (3)** A critical-analytical approach to world cinema covering film theory and the major film movements (Soviet Realism, German Expressionism, Italian Neo-realism, French New Wave, Cinema Nuovo, New German Cinema, and Surrealism) from the beginning to present. (Group E)
**201 American Film (3)** The function of cinema in contemporary society as a socio-cultural, economic, and political object, as seen through critical analysis of American films. (Group E)
**300 Private Screening (1)** Eight to twelve narrative film classics per semester on a specific topic or theme.
**301 Documentary Film (3)** Understanding and enjoying the social, philosophic, economic, and political aspects of documentary film (Group E)
**304 Women and Film (3)** An examination of the role of women in contemporary world cinema and the feminist film.

### COMPARATIVE LITERATURE STUDIES
See course listings under Comparative Literature Studies pp. 59–60.

# Ethnic Studies

Bonita Freeman-Witthoft, *Director*
C. James Trotman, *African-American Coordinator*
Philip D. Smith, *Hispanic-American Coordinator*
Irene G. Shur, *Jewish and Holocaust Studies Coordinator*

**EXECUTIVE COMMITTEE:**
Erminio Braidotti, Hung M. Chu, Andrew E. Dinniman, Lawrence A. Dowdy, Stephen D. Gilmour, William I. Guy, Yoko Hashimoto-Sinclair, Yi Ming Hsu, Dimitri I. Monos, Kostas Myrsiades, Tahany Naggar, Frederick R. Patton, Jerome M. Williams, Robert J. Young

The Institute for Ethnic Studies (IES) offers a minor and a certificate to any student, regardless of major, who satisfactorily completes 18 semester hours of work in ethnic studies. Study may lead to a general certificate in ethnic studies or to a specialized certificate in one of the following areas:

- Ethnic Studies
- African-American Studies
- Hispanic-American Studies
- Jewish-American Studies
- Holocaust Studies
- German-American Studies
- Greek-American Studies
- Scotch-Irish-American Studies
- Asian-American Studies
- Native American Studies

For current requirements and a list of approved courses in each specialization, consult the director of ethnic studies.

For each option presently offered there are in addition to the relevant ethnic studies core courses certain cognate courses. These cognate courses do not necessarily deal directly with ethnic group life but give an added dimension of social and historical background.

As soon as possible, students should register their intent to earn this distinction with the director the Institute for Ethnic Studies (Old Library). At the end of each semester, students should report to the director of the ethnic-related courses completed during the semester and the courses planned for the following semester. An updated list of courses approved for credit is available each semester before the advising and scheduling period from the Institute for Ethnic Studies. Students can use an approved ethnic-related course towards the completion of the Certificate of Ethnic Studies at the same time it is being used to fulfill their major, minor or elective requirements.

In order to maintain an active registration in the ethnic studies and the related options, students must attend two ethnically related events — speakers, musical programs, art shows, theatre productions, films, etc. — each semester.

FOR ADVISING IN ETHNIC STUDIES, CONTACT
BONITA FREEMAN-WITTHOFT, OLD LIBRARY

**MINOR IN HOLOCAUST STUDIES**

Students obtaining a minor in Holocaust Studies must take 18 hours in the following courses:

HIS 145, 146, 423, LIT 304, PHI 180, PSC 322, SSC 385, 480

The program in Holocaust studies deals not only with historical aspects of the Holocaust but also with moral and political issues involved in the prevention of future Holocausts.

**COURSE DESCRIPTIONS**

ETHNIC STUDIES
Symbol: SSC

**385 Holocaust Workshop (3)**
**480 Ethnic Cultures Workshop (3)** This workshop considers the history, traditions, customs and contributions to American life of various ethnic groups. The lectures and special programs are designed to increase the student's knowledge of the multiculture nature of American society. Projects, specifically tailored to individual needs, are directed by a faculty member of the Ethnic Studies Institute of West Chester University.

# Foreign Languages

Ronald L. Gougher, *Chairperson*
Frederick Patton, *Assistant Chairperson*
**PROFESSORS:** Gutwirth, Roberts, Smith
**ASSOCIATE PROFESSORS:** Escorcia, Gougher, Lipscomb
**ASSISTANT PROFESSORS:** Braidotti, Brown, Eisenstadt, Gilmour, Greene, Patton, Reiss, Schlau, Williams
**INSTRUCTOR:** Rosso

**BACHELOR OF ARTS**

| | |
|---|---|
| **French** | **Russian** |
| **German** | **Spanish** |
| **Latin** | |

The program in foreign languages is intended to provide an advanced educational program for the student interested in the most human aspects of the humanities — language. The program provides a flexible basis for a wide variety of vocations involving bilingual skills and cross-cultural understanding. These include government, commerce, and industry as well as publishing and social services. It also serves as a preparation for graduate studies leading to advanced degrees. The major should be planned with the help of the faculty advisor.

For all foreign language majors some study abroad is desirable, indeed almost indispensable. Students can receive assistance in selecting programs in areas where their language is spoken.

**REQUIREMENTS COMMON TO THE B.A. PROGRAMS**

1. General Requirements, see pages 30-32 — 51 s.h.
2. Major Language Courses — 33 s.h.
3. Two Cognate Courses:
   A. LIN 230 — 3 s.h.
   B. History of Language Area — 3 s.h.
4. Demonstration of proficiency in a second language through the intermediate II level.

Depending on their second language proficiency, students have from 27 to 38 elective hours. They may choose to apply some of these to additional advanced courses in their major area or to continue second or third language study.

**FRENCH REQUIREMENTS** (33 s.h.)
FRE 101-102*, 201-202, 203-204, 205-206, 207-208, 365
Additional courses to complete the 33 s.h. under advisement.

**GERMAN REQUIREMENTS** (33 s.h.)
GER 101-102*, 201-202, 203 and/or 204, 205 and/or 206, 207 and/or 208, 365.
Additional courses to complete the 33 s.h. under advisement.

**LATIN REQUIREMENTS** (33 s.h.)
LAT 101-102*, 201, 202, 303, 406.
Additional courses to complete the 33 s.h. under advisement.

**RUSSIAN REQUIREMENTS** (33 s.h.)
RUS 101-102*, 201-202, 203-204, 205-206, 207-208, 305-306, 365.
Additional courses to complete the 33 s.h. under advisement.

**SPANISH REQUIREMENTS** (33 s.h.)
SPA 101-102*, 201-202, 203-204, 207-208, 320-321, 365; Two of the following: SPA 305, 306, 307, 308, 309.
Additional courses to complete the 33 s.h. under advisement.

*Foreign language majors receive no credit toward graduation, a major, or certification for 101 and/or 102 in their majors. If 101 and/or 102 in another language are taken as free electives, they will be credited towards graduation

BACHELOR OF SCIENCE IN EDUCATION

| | |
|---|---|
| French | Russian |
| German | Spanish |
| Latin | |

The Instructional I Certificate in a foreign language qualifies the holder to teach his or her major language in the public schools (kindergarten through 12th grade) of Pennsylvania.

REQUIREMENTS COMMON TO THE B.S. ED. PROGRAMS

1. General Requirements, see pages 30-32 — 51 s.h.
2. Foreign Language Concentration — 33 s.h.
3. Two Cognate Courses:
   A. LIN 230 — 3 s.h.
   B. History of Language Area — 3 s.h.
4. Student must complete professional education sequence of — 30 s.h.
5. Electives to complete 128 hours

The student is advised to use his/her electives in areas which will contribute to his/her profession.

All students majoring in foreign languages and preparing to teach must also complete LAN 301, credited to professional education.

**FRENCH-SPECIALIZED PREPARATION** (33 s.h.)
FRE 101-102*, 201-202, 203-204, 205-206, 207-208, 365.
Additional French courses to complete the 33 s.h

**GERMAN-SPECIALIZED PREPARATION** (33 s.h.)
GER 101-102*, 201-202, 203-204, 205-206, 207-208, 365.
Additional German courses to complete the 33 s.h.

**LATIN-SPECIALIZED PREPARATION** (33 s.h.)
LAT 101-102*, 201, 202, 303, 406.

**RUSSIAN-SPECIALIZED PREPARATION** (33 s.h.)
RUS 101-102*, 201-202, 203-204, 205-206, 207-208, 365.
Additional Russian courses to complete the 33 s.h.

**SPANISH-SPECIALIZED PREPARATION** (33 s.h.)
SPA 101-102*, 201-202, 203, 204, 207-208, 320-321, 365. Two of the following: SPA 305, 306, 308, 309.
Additional Spanish courses to complete the 33 s.h.

**GREEK, ITALIAN, PORTUGUESE**
Courses in Greek, Italian and Portuguese may be offered, but no major field is available.

**GREEK AND HEBREW — CLASSICAL AND NEW TESTAMENT**
Elementary Greek I-II (GRE 101-102) and Intermediate Greek I-II (GRE 201-202).

**ITALIAN**
Elementary Italian I-II (ITA 101-102) Intermediate Italian I-II (ITA 201-202) Introduction to Dante (ITA 301), and High Points in Italian Literature (ITA 302).

**PORTUGUESE**
Elementary Portuguese I-II (POR 101-102) and Intermediate Portuguese I-II (POR 201-202).

**ADDITIONAL LANGUAGES**
Selected critical or uncommonly taught languages such as Chinese, Japanese, Polish, Serbo-Croatian, Modern Greek, Modern Hebrew, and Portuguese, on a conversational basis only.

## THE JUNIOR YEAR ABROAD PROGRAM

The following courses in French are offered at the University of Montpellier, France, under the Junior Year Abroad Program sponsored by West Chester University. The program is designed for persons interested in France in order to give them a firsthand acquaintance with French life and enable them to achieve an active command of the language.

The program is open to any student enrolled in a college or university who has completed the equivalent of two years of college French and is able to take lectures in French. During the time the student is enrolled in the program, he or she is a student of West Chester University and will receive a minimum of 30 credits for a full two semesters of university work after successful completion of the year-abroad program of studies. Each course runs for two semesters and is conducted entirely in French by French professors. Other types of programs can be arranged for non-language majors.

MONTPELLIER COURSE OFFERINGS:
Advanced Grammar and Composition (FRE 361-62)
Advanced French Conversation (FRE 363-64)
Phonetics and Translation (FRE 365-66)
Contemporary French Civilization (FRE 367-68)
Literary Studies (FRE 369-70)

**FOREIGN LANGUAGE MINORS**
Minors are available in French, German, Italian, Spanish, Russian, and Latin

1. Literature and Culture — 18 s.h.
   A Language at levels 201 and 202 required.
   B. Either 203 or 207.
   C. Three courses of literature and/or culture and civilization pertaining to the language of the minor.
2. Language — 18 s.h
   A. Language at the 201 and 202 levels.
   B. Three of the following. 203, 204, 207, 208 or 365.
   C. One course in literature and/or culture and civilization pertaining to the language of the minor.

**THE MINOR IN TRANSLATION — 18 SEMESTER HOURS**
Open to any student who has a major or minor (or the equivalent) in a second language.
LIN 230 — 3 credits
LAN 350 — 3 credits
LAN 351 — 3 credits
LAN 450 — 3 credits
LAN 460 — 3 credits
CLS 309 — 3 credits

**FOREIGN LANGUAGE TESTING AND PLACEMENT**
The Department of Foreign Languages provides a testing service for students entering the University. Based on the results of the tests given and an analysis of past experience, the Department of Foreign Languages will suggest the level of language a student should enter. After taking part in any given course for a short period of time, a student's placement could be changed if consultation between the student and an advisor results in a decision to change the placement. The department reserves the right to withhold credit towards a degree for a course taken at a lower level than was recommended by the department.

If a student wishes to take an exam to complete the language requirement or receive credit for a course, he or she must take a special exam other than those given for placement. Arrangements can be made with the chairperson of the Department of Foreign Languages.

*Foreign language majors receive no credit toward graduation, a major, or certification for 101 and/or 102 in their majors. If 101 and/or 102 in another language are taken as free electives, they will be credited towards graduation

## COURSE DESCRIPTIONS

### FRENCH

Symbol: FRE

**101-102 Elementary French I-II (3) (3)** Fundamentals of French grammar, syntax and pronunciation Introduction to French culture through easy reading texts. The audio-lingual method is employed at all times. Work in the language laboratory required

**200 Intermediate Research (1)** Special studies in French for studio art majors. Approval of department required.

**201-202 Intermediate French I-II (3) (3)** Intensive review of grammar and syntax. Readings in French literature as a basis for class discussion in French and practice in composition. Language laboratory drill for remedial work only. PREREQ FRE 102 or equivalent.

Note: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

**203-204 Advanced French Grammar and Composition I-II (3) (3)** The more complex grammatical and syntactical structures of the language, with particular attention to stylistics. Practice in writing compositions on a more advanced level, with emphasis on correct usage. PREREQ. FRE 202 or equivalent Work in the language laboratory required

**205-206 French Civilization I-II (3) (3)** France's political and educational systems, her economic and religious institutions, and her folkways. The arts in France today. PREREQ: FRE 201 or equivalent

**207-208 Advanced Oral French I-II (3) (3)** Intensive drill in the oral use of the language to develop proficiency in listening comprehension and speaking. PREREQ: FRE 203 or equivalent

**210 French for Business (1)** Study of the language and vocabulary of business, trade, and industry in French. Intended for those interested in careers in business and industry. PREREQ: FRE 201 or equivalent.

**211 Scientific French (1)** Language and vocabulary of science in French. Techniques of translating scientific texts from French to English. PREREQ: FRE 201 or equivalent

**212 French for Travelers (1)** Study of the language of travel along with a comparison of French and American customs and way of life in general.

**365 French Phonetics and Translation (3)** Description of and practice in the sounds of the French language and its major dialectical differences Contrastive analysis with English. PREREQ: LIN 230.

**400 French Novel of the 19th Century (3)** A study of five important novels of the 19th century in France: *Le Rouge et le noir (The Red and the Black)*, by Stendhal, *Notre Dame de Paris* by Hugo, *Pere Goriot* by Balzac, *Madame Bovary* by Flaubert, and *Germinal* by Zola in English

**401 French Literature of the 18th Century (3)** The "philosophes" of the 18th century, emphasizing the works of Voltaire, Rousseau, Montesquieu, and Diderot. PREREQ: FRE 206.

**402 French Lyric Poetry (3)** Development of French lyric forms; French versification, study of selected poets, using "explication de textes."

**403 French Literature of the 17th Century (3)** 17th Century prose, lyric and narrative poetry; the concept of classicism

**404 French Classical Drama (3)** Corneille, Racine, and Moliere. PREREQ. FRE 205.

**405 French Literature of the Middle Ages and Renaissance (3)** Survey of selected readings in Modern French translation from Old French literature and from such major figures as Villon, Rabelais, the Pleiade poets, and Montaigne.

**406 Modern French Theater (3)** Study of 20th century theatrical forms, extending from the end of World War I to the present

**407 19th Century French Novel (3)** Development of the French Novel from the pre-Romantic period through the Naturalistic writers.

**408 20th Century French Novel (3)** The French novel of the century, from Proust and Gide to the "roman nouveau "

**409 Women and Men in French Literature (3)** Work by women and men novelists, poets or dramatists that present striking images of love and conflict between the sexes.

**410 Independent Studies in French Language and Literature (3)** Special topics for advanced students only. Admission by permission of instructor

**411 Seminar in French (3)** Independent study and research for upper division students. Topics announced annually by the French faculty. PREREQ: permission of instructor.

**412 Seminar in French (3)** Independent study and research for upper division students. Topics announced annually by the French faculty. PREREQ. permission of instructor

**FRENCH JUNIOR YEAR ABROAD PROGRAM**

361-62 Advanced French Grammar and Composition III, IV (6)
363-64 Advanced French Conversation I, II (6)
365-66 French Phonetics and Translation I, II (6)
367-68 Contemporary French Civilization I, II (6)
369-70 French Literary Studies I, II (6)

### GERMAN

Symbol: GER

**101-102 Elementary German I-II (3) (3)** Fundamentals of German grammar, syntax, and pronunciation Introduction to German culture through easy reading texts. The audio-lingual method is employed, and language laboratory drill is required

**200 Intermediate Research (1)** Special studies in German for studio art majors Approval of department required

**201-202 Intermediate German I-II (3) (3)** Review of grammar and syntax. Readings in German literature as a basis for class discussion in German and practice in composition Language laboratory drill required for remedial work only. PREREQ: GER 102 or equivalent.

Note: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.

**203-204 Advanced German Grammar and Composition I-II (3) (3)** The more complex grammatical and syntactical structures of the language with particular attention to stylistics. Practice in writing compositions on a more advanced level with emphasis on correct usage PREREQ GER 202 or equivalent.

**205 Survey of German Literature I (3)** German literature from its earliest beginnings to 1800. PREREQ: GER 202 or equivalent

**206 Survey of German Literature II (3)** German literature from 1800 to the present. PREREQ GER 202 or equivalent

**207-208 Advanced Oral German I-II (3) (3)** Intensive drill in the oral use of the langauge to develop proficiency in listening comprehension and speaking. PREREQ. GER 203 or equivalent

**210 German for Business (1)** Intensive practice in writing business correspondence, job applications, and discussions of business practices in Germany.

**211 German for Science (1)** Study of basic vocabulary for reading documents related to various scientific fields. Readings in individual fields of endeavor.

**212 German for Travel (1)** Study of major cities and cultural sites in Germany. Concentration on contemporary information and travel.

**221 German Civilization (3)** An analysis of the major contributions of German civilization to western culture in the areas of art, music, science, and literature (in German). PREREQ. GER 202 or equivalent.

**EGE 222 German Civilization (3)** An analysis of the major contributions of German civilization to western culture in the areas of art, music, science, and literature. No knowledge of German required

**365 German Phonetics (3)** Description and practice in the sounds of the German language and its major dialectical differences. Contrastive analysis with English. PREREQ: LIN 230.

**400 20th Century German Literature in Translation (3)** A study of selected novels, short stories, and plays from the German literature of the 20th century. An introduction to some of the modern writers of the German speaking world from the perspective of the social and political developments in modern Germany Work is done in English

**401 The Age of Goethe (3)** German literary doctrines and masterpieces of the periods of Enlightenment, Storm, and Stress, and Classicism PREREQ: GER 202 or equivalent.

**402 Contemporary German Literature (3)** Works of the principal German writers of the 20th century. PREREQ: GER 202 or equivalent.

**403 The German Novelle (3)** The German short story from Romanticism to the present. PREREQ GER 202 or equivalent

**404 Goethe (3)** Important works of Goethe; his background and literary development. PREREQ GER 205.

**406 German Literature in the 19th Century (3)** German realism of the 19th Century. PREREQ: GER 206 or equivalent

**407 German Lyric Poetry (3)** Modern German poetry of pre- and post-World War II. PREREQ GER 206 or equivalent.

**408 Modern German Drama (3)** Major dramatists of the 20th Century PREREQ. GER 206 or equivalent

**409 German Literature of the Romantic Period (3)** PREREQ. GER 206 or equivalent

**410 Independent Studies in German Language and Literature (3)** Special topics for advanced students only; admission by permission of instructor

**411 Seminar in German (3)** Independent study and research for upper division students. Topics announced annually by the German faculty PREREQ permission of instructor

**412 Seminar in German (3)** Independent study

and research for upper division students Topic announced annually by the German faculty PREREQ: permission of instructor

## GREEK
Symbol: GRE

**101-102 Elementary Greek I & II (3)** Forms, grammar, and idioms of Attic and Koine Greek Readings in Septuagint and New Testament Greek.
**201 Intermediate Greek I (3)** Readings in Socratic dialogues of Plato.
**202 Intermediate Greek II (3)** Homeric prosody and grammar. Reading of selected portions of the Homeric Poems.
**301-302 Greek Reading I & II (3) (3)** Readings in prose and verse, authors usually by genre. May be repeated for credit.

## HEBREW
Symbol: HEB

**101-102 Elementary Biblical Hebrew I & II (3) (3)** Forms, grammar, and idioms of Biblical Hebrew. Selected readings.
**201-202 Intermediate Biblical Hebrew I & II (3) (3)** Readings in the prose and poetic document of the *Biblia Hebraica*.

## ITALIAN
Symbol: ITA

**101-102 Elementary Italian I-II (3) (3)** Intensive drill, both in class and the language laboratory, with pronunciation, intonation, and basic linguistic patterns. Introduction to Italian culture through basic dialogues and easy reading texts.
**201-202 Intermediate Italian I-II (3) (3)** Review of Italian grammar and syntax. Introduction to Italian literature through short readings of intermediate difficulty. Composition and conversation in Italian based on reading assignments. Language laboratory for remedial drill. PREREQ: ITA 102 or equivalent.
**301 Introduction to Dante (3)** This course is taught in English and designed for those desirous of further study in Italian literature, as well as for students in related fields: other Romance languages, English literature and other areas.
**302 High Points in Italian Literature (3)** The most important Italian writers from the Renaissance to the present day, with emphasis on the modern period
**303 Italian Culture and Civilization (3)** An introduction to the philosophical and artistic contributions of the Italian world to Western Civilization.
**304 Advanced Oral Italian (3)** Theoretical and practical approach to phonology, phonetics, and basic self-expression in the Italian language.
**410 Independent Studies in Italian Language & Literature (3)** Special topics for advanced students only Admission by permission of the instructor
**411 Seminar in Italian I (3)** Independent study and research for upper division students. Topics announced annually by the Italian faculty. Admission by permission of the instructor
**412 Seminar in Italian II (3)** Independent study and research for upper division students. Topics announced annually by the Italian faculty. Admission by permission of the instructor

## LATIN
Symbol: LAT

**101-102 Elementary Latin I-II (3) (3)** Forms, syntax, and idioms of classical Latin. Selected readings.
**201 Cicero (3)** Selections from the orations, letters, and essays. PREREQ. LAT 101, 102, or two years of secondary school Latin
**202 Vergil (3)** Reading and analysis of celebrated portions of the *Aeneid*. The nature of Latin epic poetry PREREQ: LAT 201 or three years of secondary school Latin
Note: LAT 202 or four years of secondary school Latin in prerequisite to all following courses in Latin.
**301 Teaching of Latin (3)** Introduction to the problems, methods, and materials in the teaching of Latin.
**302 The Latin Lyric Poets (3)** Latin lyric poetry through readings in Catullus, the Odes, and Epodes of Horace. Practice in the composition of lyric poetry.
**303 Advanced Latin Prose Composition (3)** Required of Latin majors, open to other students accepted by the instructor The complex syntactical structures of Latin of classical style. Translations of English into classical Latin.
**304 The Latin Elegiac Poets (3)** Latin elegiac poetry through readings, in Ovid, Tibullus, Lygdamus, Sulpicia, and Propertius. Practice in the composition of the elegiac poetry
**305 Reading Course in Latin (3)** Open to Latin majors only Area and content to be determined by student's needs. May be repeated for additional credit
**306 Roman Historians (3)** Introduction to Roman historiography Readings in Livy, Sallust, and Tacitus.
**401 Roman Drama (3)** Origins and development of Roman drama. Selected plays of Plautus, Terence, and Seneca
**402 Roman Philosophy (3)** Introduction to Greek and Roman philosophy. Readings in Cicero, "Tusculan Disputations," and Lucretius, "De Rerum Natura "
**403 Roman Satire (3)** Origins and development of Roman satire. Readings in Horace, Persius, and Juvenal.
**404 The Latin Novel (3)** Readings in Petronius, "Satyricon," and Apuleius, "The Golden Ass." Lectures and discussions of the emergence of the novel as a literary form
**405 Medieval Latin (3)** Prose and poetry from the 4th to the 17th centuries.
**406 Latin Tutorial Course (3)** Required of majors in Latin or Classics, open to other students accepted by the instructor Introduction to the history of the alphabet, principles of historical and comparative linguistics, especially as applied to Greek and Latin, and history of the Latin language as seen in ancient authors and inscriptions.
**410 Independent Studies in Latin Language and Literature (3)** Special topics for advanced students only, admission by permission of instructor
**411 Seminar in Latin (3)** Independent study and research for upper division students. Topics announced annually by the Latin faculty. PREREQ: permission of instructor
**412 Seminar in Latin (3)** Independent study and research for upper division students. Topics announced annually by the Latin faculty PREREQ: permission of instructor

## PORTUGUESE
Symbol: POR

**101-102 Elementary Portuguese I-II (3) (3)** Fundamentals of Portuguese grammar, syntax, and pronunciation. Introduction to Brazilian heritage and culture through graded reading selections.
**201-202 Intermediate Portuguese I-II (3) (3)** Review and continuation of basic Portuguese with emphasis on vocabulary expansion and cultural insights through increased reading materials. Introduction to selected Portuguese and Brazilian authors. PREREQ: POR 102.

## RUSSIAN
Symbol: RUS

**101-102 Elementary Russian I-II (3)** Intensive drill in pronunciation, intonation, and basic linguistic patterns to develop fundamental communicative skills. Extensive language laboratory work is essential.
**200 Intermediate Research (1)** Special studies in Russian for studio art majors Approval of department required
**201-202 Intermediate Russian I-II (3) (3)** Reinforcement and refinement of communicative skills through the continuing study and review of grammatical structures. Composition and conversation based on writings of intermediate difficulty by Soviet writers. Students majoring in the sciences or mathematics may elect readings pertaining to the scientific field in the second semester Extensive language laboratory work is essential. PREREQ RUS 102.

Note: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.
**203-204 Advanced Russian Grammar and Composition I-II (3) (3)** The more complex grammatical and syntactical structures of the language, with particular attention to stylistics. Practice in writing compositions on a more advanced level, with emphasis on current usage. Regular use of the tape program is essential. PREREQ: RUS 202 or equivalent
**205-206 Advanced Readings in Russian Literature I-II (3) (3)** Works of Russian and Soviet literature are read and analyzed PREREQ: RUS 202 or equivalent
**207-208 Advanced Oral Russian I-II (3) (3)** Intensive drill in the oral use of the language to develop proficiency in listening comprehension and speaking. Regular use of the tape program is essential. PREREQ: RUS 203 or equivalent.
**ERU 209 Soviet Russian Culture (3)** An interdisciplinary course designed to acquaint students with Russian culture and life in the Soviet Union today No knowledge of Russian required.
**303-304 Scientific Russian I-II (3) (3)** Reading and translation in general science and basic technical fields PREREQ. RUS 202 or equivalent.

**305-306 Russian Civilization I-II (3) (3)** A study of the cultural, philosophical, religious, and artistic contributions of Russia PREREQ RUS 202 or equivalent
**310 Russian Literature in Translation (3)** Survey of Russian Literature from its origin to the present All works read in English. No knowledge of Russian required
**365 Russian Phonetics (3)** An overview of Russian phonetics, morphophonemics, and intonation patterns. Dialects and varieties of Russian. Phonetics and intonation practice in the language laboratory. PREREQ. LIN 230.
**401 The Russian Novel (3)** The Russian novel and literary trends of the 19th and 20th centuries. PREREQ: RUS 205 or equivalent
**402 The Russian Drama (3)** Works of the major dramatists of the 19th and 20th centuries. PREREQ: RUS 205 or equivalent.
**403 Russian Poetry of the 20th Century (3)** A study of the principal Russian poets of the 20th century. PREREQ. RUS 205 or equivalent.
**410 Independent Studies in Russian Language and Literature (3)** Special topics for advanced students only; admission by permission of instructor.
**411 Seminar in Russian (3)** Independent study and research for upper division students. Topics announced annually by the Russian faculty. PREREQ. permission of instructor
**412 Seminar in Russian (3)** Independent study and research for upper division students Topics announced annually by the Russian faculty PREREQ. permission of instructor.

## SPANISH

Symbol. SPA

**101-102 Elementary Spanish I-II (3) (3)** Fundamentals of Spanish grammar, syntax, and pronunciation from the oral-aural point of view. Introduction to Spanish culture through easy reading texts.
**200 Intermediate Research (1)** Special studies in Spanish for studio art majors Approval of department required
**201-202 Intermediate Spanish I-II (3) (3)** Review of Spanish grammar and syntax. Readings in Spanish literature as a basis for class discussion in Spanish and practice in composition Language laboratory drill recommended for remedial work where needed PREREQ: SPA 102 or equivalent.

Note: All advanced literature and civilization courses include lectures and discussion in the foreign language, and all student papers and examinations must be written in the foreign language.
**203 Advanced Spanish Grammar (3)** Review and mastery of Spanish grammar with emphasis on common grammatical problems, syntactic structures, and idiomatic expression PREREQ. SPA 202 or equivalent
**204 Advanced Spanish Composition (3)** Written expression in Spanish on a more advanced level. Special attention to stylistics. An application of SPA 203. PREREQ SPA 203
**207-208 Advanced Oral Spanish I-II (3) (3)** Intensive drill in oral usage of the Spanish language to develop proficiency in listening comprehension and speaking. PREREQ SPA 203 or equivalent
**305 Spanish Medieval Literature (3)** Spanish literature from its earliest beginning to the end of the 14th century PREREQ. SPA 203 or equivalent.
**306 Spanish Literature of the Renaissance (3)** Spanish literature from the Celestina through the 17th century. Emphasis on the Golden Age. PREREQ: SPA 203 or equivalent
**307 Spanish Literature of the 18th and 19th Centuries (3)** Spanish literature from the beginning of the 18th century to the end of the 19th excluding the Generation of 1898. PREREQ: SPA 203 or equivalent.
**308 Spanish Literature of the 20th Century (3)** The literature and thought of this century in Spanish letters. PREREQ: SPA 203 or equivalent.
**309 Spanish American Literature (3)** Spanish American literature through major authors and works. Perspective on the different literatures. PREREQ. SPA 203 or equivalent.
**ESP 319 Civilization of Spain (3)** A study of the origins and evolution of Spanish character, tradition and thought The interrelationship of its history and arts and the scope of its contribution to western culture No knowledge of Spanish required.
**320 Civilization of Spain (3)** Major contributions of Spain. Cultural, geographic, literary, philosophical, and artistic manifestations of the Hispanic world PREREQ: SPA 202 or equivalent
**321 Civilization of Spanish America (3)** Cultural, geographic, literary, philosophical, and artistic manifestations of the Hispanic American World PREREQ. SPA 202 or equivalent.
**322 Latin American Culture & Civilization (3)** A cultural survey of Latin America. Essentially the same content as SPA 321, except course is given in English.
**326 Variants of Spanish (3)** A survey of the variant forms of Spanish throughout the Spanish-speaking world from the phonological, morphological, syntactical and semantic points of view. Special emphasis is placed upon the regional phenomena of Spain, Latin America and the United States (Chicano, Puerto Rican and Cuban).
**365 Spanish Phonetics (3)** Description and practice in the sounds of the Spanish language and its major dilectical differences. Contrastive analysis with English. PREREQ LIN 230.
**400 An Introduction to Cervantes and Don Quixote (3)** Reading the full text of Don Quixote. Important chapters and topics will be analyzed in English. Special emphasis given to problems of translation
**401 Spanish "Comedia" of the Golden Age (3)** Spanish National Theater Themes and traditions in the "Comedia." PREREQ SPA 306 or equivalent.
**402 Cervantes (3)** Study of "Don Quixote." Cervantes contributions to literature. An insight into his works. PREREQ SPA 306 or equivalent
**403 Spanish Lyric Poetry (3)** Analysis of Spanish poetic expression and poetic form. Reading of the main lyric poets of Spanish literature. PREREQ SPA 305 or 306 or 307 or 308 or equivalent
**404 The Picaresque Novel (3)** The picaresque tradition in Spain The literary "picaro " The contributions of Spain to other literatures PREREQ. SPA 306 or equivalent
**405 Modern Spanish Theater (3)** Contemporary Spanish theater from the late 19th century to present. PREREQ SPA 307 or 308 or equivalent.
**406 The Generation of 1898 (3)** An evaluation of the Generation of 1898, its role in the literature, history and philosophy of Spain. PREREQ: SPA 307 or 308 or equivalent
**410 Independent Studies in Spanish Language and Literature (3)** Special topics for advanced students only; admission by permission of instructor
**414 The Black in Spanish American Literature (3)** For undergraduates who are interested in the characterization of blacks in Spanish American Literature and the political and social context of their literary portrayal
**456 Seminar in Spanish (3)** Independent study and research for upper division students Topics announced annually by the Spanish faculty. PREREQ permission of instructor
**457 Seminar in Spanish (3)** Independent study and research for upper division students. Topics announced annually by the Spanish faculty. PREREQ: permission of instructor.

## ADDITIONAL LANGUAGES

**191-192 Critical Language I-II (3) (3)** Self-instructional program in one of the seldom taught languages: Chinese, Japanese, Polish, Serbo-Croatian, Modern Greek, Modern Hebrew, Portuguese, etc. The student works with an integrated text, tape program, and a tutor. By permission of Department of Foreign Languages.
**193-194 Critical Language III-IV (3) (3)** Continuation of LAN 191-192

## COURSES COMMON TO ALL LANGUAGES

**LAN 301 Teaching of Modern Languages: K-12 (3)** Problems, methods, and materials of teaching second languages at all levels. Observation and participation in second-language classrooms PREREQ: completion of language courses through the advanced level and LIN 230.
**LAN 303 Second Languages in the Elementary School (3)** Techniques and materials used in teaching second languages in the elementary school. Practice in the application of these techniques and observation of foreign language classes. PREREQ completion of intermediate level in the chosen foreign language.
**LAN 305 Introduction to Bilingual/Bicultural Education (3)** Introduction to the history, philosophy, current status, and future directions of bilingual/bicultural education Survey of materials, techniques, instructional processes, and instructional patterns. Overview of testing, placement, and pupil evaluation PREREQ. intermediate level proficiency in a second language and LIN 250 or equivalent
**LAN 310 Contemporary Literary Criticism (3)** A survey of the major developments in European literary criticism during the 20th century with emphasis on the developments of the last 20 years.
**LAN 411 Topical Seminar (3)** Specialized studies in language and the teaching of foreign languages.
**LIN 230 (also ENG 230) Introduction to Linguistics (3)** See ENG 230.
**LIN 250 Psycholinguistics (3)** Introduction to the study of relationships between language, generative models, communication theory, and learning theory. Major emphasis on natural language development and bilingualism
**LIN 330 (also PHI 330) Introduction to Meaning (3)** See PHI 330
**LIN 360 (also PHI 360) Philosophy of Language (3)** See PHI 360.
**LIN 380 Language and Culture (3)** Language as an aspect of culture, linguistic-perceptual-cognitive categories; social and psychological aspects of lan-

guage. PREREQ: LIN 230 or permission of instructor.
**LIN 406 Meaning in Language (3)** See PHI 406
**LIN 411-412 Seminar in Linguistics (3)** Specialized studies in linguistics. Topics announced annually. PREREQ: LIN 230 or at least junior standing
**LIN 415 (also SPC 415) General Semantics (3)** See SPC 415

TRANSLATION COURSES
Symbol: LAN

**250 The Art of Translation (3)** Techniques of translating literary, journalistic, and technical and scientific texts. PREREQ: 202 or equivalent in a modern language.
**350 Translation I (3)** Introduction to translation as a profession. A survey of the history, literature and theories of translation and of professional organizations and technical resources available to translators.
**351 Translation II (3)** Practical work in translating a variety of materials drawn from various fields including literature, business, government and the sciences
**450 Translation III (3)** Practice translating more advanced materials with specialization in one or two subject areas.
**460 Field Placement (3)** Internship under faculty supervision in a translation agency, business firm, or other organization or institution which has substantial translation work as part of its operation.
**ENG 307 Literary Translation Workshop (3)**

# Geology and Astronomy

Sandra F. Pritchard, *Chairperson*
**PROFESSORS:** Greenberg, Reed.
**ASSOCIATE PROFESSORS:** Casciato, Ehleiter, Harber, Johnson, Pritchard
**ASSISTANT PROFESSORS:** Smith, Wiswall

The Department of Geology and Astronomy offers a Bachelor of Science in Earth Science with concentrations available in geology or astronomy; a Bachelor of Science in Chemistry/Geology; and in cooperation with the School of Education, a Bachelor of Science in Education with an emphasis in earth and space science.

1. The B.S. in EARTH SCIENCE is a liberal arts program designed to prepare recipients for occupations in the earth sciences or for studies toward an advanced degree. The curriculum involves an overall science and mathematics exposure but allows for a greater concentration in one aspect of the earth or space sciences, such as the environment, applied geology, astronomy, or oceanography.
2. The B.S. in EDUCATION in EARTH SCIENCE is a professional degree program designed to prepare certified secondary school teachers of earth science. The curriculum involves an overall science exposure with a concentration in the earth sciences.
3. The B.S. in CHEMISTRY/GEOLOGY is a liberal arts program designed to prepare recipients for occupations in chemistry and/or geology as well as for studies toward an advanced degree. The curriculum involves a balanced exposure in chemistry and geology.

A cooperative five-year program with Pennsylvania State University leading to a B.S. from West Chester University in Physics and a B.S. in Petroleum and Natural Gas Engineering from Pennsylvania State University is also available. For further information about this program refer to the Physics and Pre-Engineering section of this catalog.

Regardless of which degree is pursued, all students must consult with their advisor regularly to avoid problems. Those in the B.S. in Education program will have a second advisor in the School of Education to help the student meet the secondary education requirements.

**REQUIREMENTS COMMON TO ALL DEGREE PROGRAMS***

| | |
|---|---|
| 1. General Requirements | 42 s.h. |
| 2. Science Cognates<br>CHE 103, CRL 103; CSC 101 or 115 | 8 s.h. |
| 3. Earth Science Courses<br>ESS 101 or 203 with ESL 203 | 3-4 s.h. |

**BACHELOR OF SCIENCE — EARTH SCIENCE***

| | |
|---|---|
| 1. Science Cognates<br>CHE 104, CRL 104; MAT 105 or 110, MAT 161 or 141, MAT 162 or 142; PHY 170 or 130, PHY 180 or 140 | 24 s.h. |
| 2. Earth Science Core Courses<br>ESS 111, ESL 201, ESS 204, ESS 230, ESS 240, ESS 302, ESS 305 or 320, ESS 307, ESS 331 or 450, ESS 336, ESS 478 | 36-37 s.h. |
| 3. Electives<br>SPC 101 and ENG 371 strongly recommended | 13-15 s.h. |

**BACHELOR OF SCIENCE — EARTH SCIENCE/GEOLOGY***

| | |
|---|---|
| 1. Science Cognates<br>CHE 104, CRL 104; MAT 105 or 110, MAT 161 or 141, MAT 162 or 142; PHY 170 or 130, PHY 180 or 140 | 24 s.h. |
| 2. Earth Science Core Courses<br>ESL 201, ESS 204, ESS 302, ESS 305 or 320, ESS 331 or 450, ESS 478 | 21-22 s.h. |
| 3. Earth Science Approved Electives | 12 s.h. |
| 4 Electives<br>SPC 101 and ENG 371 strongly recommended | 16-18 s.h. |

**BACHELOR OF SCIENCE — EARTH SCIENCE/ASTRONOMY***

| | |
|---|---|
| 1. Science Cognates<br>CHE 104, CRL 104, MAT 105 or 110, MAT 161 or 141, MAT 162 or 142; PHY 170 or 130, PHY 180 or 140 | 24 s.h. |
| 2. Earth Science Core Courses<br>ESS 111, ESL 201, ESS 204, ESS 255, ESS 478 | 16 s.h |
| 3 Specialized Courses — any 2<br>ESS 153, ESS 254, ESS 262, ESS 293, ESS 475 | 6 s.h |

*All degree and minor requirements are subject to approval.

4. Other Courses 15-18 s.h.
   ESS 302, ESS 305 or 320, ESS 307, ESS 331 or 450, ESS 480
5. Electives 10-14 s.h.
   SPC 101 and ENG 371 strongly recommended

**BACHELOR OF SCIENCE — CHEMISTRY/GEOLOGY***

1. Science Cognates 37 s.h.
   CHE 104, CRL 104, CHE 321, CRL 321, CHE 341 or 424, CRL 341 or 424; PHY 170 or 130, PHY 180 or 140; MAT 105 or 110, MAT 161 or 141, MAT 162 or 142, MAT 121
2. Earth Science Core Courses 22 s.h.
   ESS 204, ESL 204, ESS 302, ESS 305, ESS 310, ESS 313, ESL 327, ESL 329
3. Electives 15-16 s.h.
   SPC 101 and ENG 371 strongly recommended

**BACHELOR OF SCIENCE in EDUCATION — EARTH AND SPACE SCIENCE***

1. Secondary Education Requirements including SCE 350 33 s.h.
2. Science Cognates 14-15 s.h.
   BIO 110; MAT 105 or 161; PHY 130; MAT 121, MTL 121
3. Earth Science Core Courses 15-16 s.h.
   ESS 111, ESL 201, ESS 230, ESL 230, ESS 240, ESS 255
4. Electives — 3 or 4 courses from these groups 9-13 s.h.
   ESS 302 or 313, ESS 320 or 450, ESS 336 or Remote Sensing, ESS 343 or 331

**MINOR PROGRAMS**

Students may choose to minor in any of the following programs. Courses are selected with approval of the student's advisor.

1. **Astronomy**
   ESS 111 plus 4 other astronomy courses with approval of minor advisor
2. **Earth Science**
   ESS 101 or ESS 203 with ESL 203 optional, ESS 111, ESS 230 with ESL 230 optional, ESS 240, and one course in Earth Science with approval of minor advisor
3. **Geology**
   ESS 101 or 203 plus 4 other geology courses with approval of minor advisor

*All degree and minor requirements are subject to approval

## COURSE DESCRIPTIONS

GEOLOGY AND ASTRONOMY
SYMBOL: ESS unless otherwise shown

★ **101 Introduction to Geology (Formerly called Earth Science) (3)** The earth's composition and history, the processes that occur on and within the earth 2 hours lecture, 2 hours lab.

**102 Humans and the Environment (3)** A study of the ability of humans to survive and maintain their life quality considering the limited resources and recycling capacity of planet Earth.

★ **111 General Astronomy (3)** A descriptive course including the composition and evolution of solar and stellar systems. 2 hours lecture, 2 hours lab.

**115 Fundamental World Place Names (1)** A survey of major countries, capitals and principal cities, large rivers, water bodies and geologically important physical features through map work and lecture

**ESL 151 Graphic Geology I (1)** Introduction to the preparation and use of drawings in the geological sciences including the following topics: drawing tools and standards, contour maps, roadways, strike and dip of a plane, plots of a survey, topographic maps.

**153 Nautical Astronomy (Celestial Navigation) (3)** Technical skills including celestial coordinates, principles of time, the navigational triangle, lines of position and star identification. PREREQ: ESS 111.

**ESL 153 Nautical Astronomy Laboratory (1)** Observation will be taken in the real sky and with a water horizon, and data will be reduced to determine the position of the observer

**ESL 201 Fundamentals of Techniques in Geology (3)** An introduction to the basic methods of geologic data collection, analysis, and presentation, literature research; and report writing. One weekend field trip is required PREREQ: ESS 101 or ESS 203.

**203 Physical Geology (3)** The earth's composition (minerals and rocks) and earth processes (weathering, erosion, volcanism, and diastrophism), 3 hours lecture

**ESL 203 Physical Geology Laboratory (1)** 2 hours (required with lecture).

**204 Historical Geology (3)** The geologic history of the earth; and the evidences for this history.

**ESL 204 Historical Geology Laboratory (1)** 2 hours (required with lecture).

**206 Gemstones (3)** A survey of gem formation, identification, fashioning, and evaluation For the general student. Demonstrations, specimens and field trips complement lecture topics. No science background is assumed

**224 History of the Earth Sciences (3)** An examination of the history of scientific thought and contributions in the area of the earth sciences PREREQ: Completion of core requirements in science and mathematics

**226 Economic Geology (3)** The origin, geologic and geographic distribution, limits, and production technology of mineral resources. PREREQ: ESS 101 or ESS 203, or permission of instructor

**230 Introduction to Oceanography (3)** A survey of our present knowledge of the waters and floors of the oceans.

**ESL 230 Introduction to Oceanography Laboratory (1)**

**240 Introduction to Meteorology (3)** Principles governing the conditions of the earth's atmosphere, and how these principles determine weather conditions.

**254 Archeoastronomy (3)** Astronomical skills of the Babylonians, Egyptians, Greeks, Chinese, Maya, Incas, Aztecs, and the North American Indians. PREREQ: ESS 111 or permission of instructor

**255 Intermediate Astronomy (3)** An analytical and qualitative analysis of selected astronomical phenomena. Such topics as: telescope optics (including photographic and photoelectric attachments), lunar and planetary orbits, stellar motions and magnitudes, galactic classifications, and distances. 2 hours lecture, 2 hours lab. PREREQ: ESS 111

**262 History of Astronomy (3)** Development of astronomical theories from Greek times until the twentieth century. PREREQ. ESS 111

**293 Introduction to Space Science (3)** Techniques of exploration of the extraterrestrial universe and of monitoring earth from space. Typical results: Unresolved problems. Selected applications. PREREQ: ESS 111

**302 Mineralogy (3)** Physico-chemical principles used in the classification, identification, and origin of minerals. Field examination of local minerals. PREREQ: CHE 104, ESS 203

**305 Petrology (3)** Principles of rock origin identification and classification. Laboratory and field examination of rocks. PREREQ. ESS 302.

**307 Geology of the Solar System (3)** The geology, origin, evolution, and properties of planets, comets, asteroids, moons and meteorites.

**310 Intermediate Mineralogy (3)** How the petrographic microscope and x-ray diffraction are used to identify minerals. PREREQ: One course in basic mineralogy (ESS 302).

**313 Geochemistry (3)** The chemistry of the earth and its relation to geologic processes. PREREQ. CHE 104, ESS 203

**320 Structural Geology (4)** Determination of the sequential development and the forces involved in the various structural features of the earth PREREQ: ESS 203, 204

**323 General Geologic Field Studies of Southeastern Pennsylvania (3)** Occurrence, relationships, and geologic history of the rocks, minerals and soils of this area, studied at representative locations. PREREQ. ESS 302.

**328 Engineering Geology (3)** The application of geological factors into the planning and design of engineered construction, ground water extraction, and waste disposal. PREREQ. ESS 101 or ESS 203 or permission of instructor

**ESL 327 Electron Microscopy I (3)** A one semester lecture/laboratory course in theory operation and applications of electron beam technology in scientific research Course scheduled on student-demand basis

**ESL 329 Electron Microscopy II (3)** A one-semester lecture/laboratory course in advanced theories of electron microscopy in scientific research. Emphasis on individual projects. PREREQ ESS 327. Course scheduled on student-demand basis

★ Approved distributive requirement course.

**331 Introduction to Paleontology (3)** Identification and study of common fossils in order to understand their life process and geologic significance. PREREQ. one course in geology.
**336 Environmental Geology (3)** The application of geological information to human problems encountered in the physical problems, such as flooding, earthquakes, coastal hazards, waste disposal, and land use. PREREQ. ESS 101 or 203 or permission of instructor
**339 Hydrology (3)** The factors that control the distribution, occurrence, and recoverability of groundwater; techniques for locating and estimating recoverable water; groundwater pollution and waste water disposal. PREREQ: ESS 203, 204
**341 Geology and Geography of Plants (3)** The study of paleo and modern spatial characteristics and distributions of vegetation and their relationship to the geologic, geographic, climatic and man-induced features of the environment. PREREQ: ESS 101 or GEO 101.
**342 Geophysics (3)** Gravitational, magnetic, seismic (refraction and reflection), and electrical properties of rocks and minerals in the earth. Physical principles of the earth; geophysics in relation to economic deposits. PREREQ: ESS 203, and 204, PHY 180 or 140.
**343 Geomorphology (3)** Constructional and degradational forces which have shaped present landforms, and are constantly reshaping and modifying landforms. Interpretation of geologic and topographic maps; field studies. PREREQ. ESS 101 or GEO 101.
**344 Regional Geomorphology of North America (3)** A systematic analysis of surface configurations and landform regions of North America; the processes at work on these configurations in the past and at present; human relationships to these features and processes. PREREQ: ESS 343
**345 Geology of Petroleum (3)** The geology, origin, occurrence, properties, development, and exploitation of petroleum and natural gas. The future energy demands. PREREQ: ESS 203 or permission of instructor
**394 Geology of the Northwestern National Parks (4)** Field course.
**395 Geology of the Southwestern National Parks (4)** Field course.
**408 Field Geology (3)** Practical experience in the techniques and tools of the field geologist PREREQ: ESS 203, 204, 305.
**409 Field Geology II (3)** Exploration techniques involving inference methods: applied geophysics, construction and graphical representation of complex three-dimensional structures.
**418 Structural Petrology (3)** Deformation mechanisms, rheology; theory of strain. formation and evolution of tectonic features.
**425 Tectonics (3)** To appreciate how the surface of the planet evolves; why things are where they are.
**450 Sedimentation and Stratigraphy (4)** Development of the relative geological time, methods and techniques for the description and evaluation of the total environment of the time of the formation of stratified rock.
**460 Internship (1-18)** Work with industry, local, state or federal government agencies under faculty supervision
**475 Introduction to the Planetarium (3)** Principles and use of the planetarium in a teaching situation. Specific projects are assigned. PREREQ: ESS 111
**478 Earth Science Seminar (3)** Reports on special topics and current development.
**480 Special Problems (1-3)** Reports on special topics and current developments in the earth and space sciences. PREREQ: consent of instructor
**490 Fundamentals of Soil (3)** The properties of soils, edaphology, pedology: chemical, physical, and biological factors. Soil genesis and classification
**IND 201 Unified Science (3)** An interdisciplinary course dealing with methodologies used by all scientists; an analysis of the concepts that find expression in all of the biological and physical sciences.
**SCE 300 Science in the Primary Grades (3)** A comprehensive coverage of the teaching of science in the pre-school and primary grades (K-3).
**SCE 310 Science for the Elementary Grades (3)** A course to prepare the elementary teacher for teaching science. Selected units or problems which cut across various fields of science. Methods and processes of science and available resources. PREREQ. Completion of science and mathematics general education requirements.
**SCE 350 Science Education in the Secondary School (3)** Philosophy, objectives, and methods of teaching science. Practical experience provided. PREREQ: A major in liberal arts or secondary education (sciences).
**SCE 370 Science and Human Values (3)** A one semester course illustrating the impact of science on human thought, values, and institutions. Ethical, sociological, and psychological aspects of science-mediated change are covered in depth.

# Government and Planning

F. Robert Bielski, *Chairperson*
William F. Burns, *Assistant Chairperson*

### Geographers
**PROFESSOR:** Rengert
**ASSOCIATE PROFESSORS:** Bielski, Grassel, Rampon, Tachovsky, W. Thomas

### Political Scientists
**PROFESSORS:** Brady, Marbach, Milne, Shea
**ASSOCIATE PROFESSORS:** Burns, Burton, Eldridge, Iacono, Sandhu, J. Smith, Weislogel

The Department of Government and Planning came into existence in 1979 by merging the departments of "Geography and Planning" and "Government and Politics." This action recognized their inter-related programs in planning, public services, and public administration.

The choices of majors and minors are outlined in the following pages. Courses are usually offered at least once a year unless otherwise noted. Majors must consult printed department materials, posted announcements, and their advisors regularly for current requirements and opportunities.

**PROGRAMS**
Bachelor of Arts — Geography
Bachelor of Arts — Political Science
Bachelor of Arts — Political Science/Public Administration
Bachelor of Arts — Political Science/International Relations
Bachelor of Science in Education — Social Studies, Concentrations in general social studies, geography, and political science.

## Geography

The basic objectives of study in geography and planning at West Chester are three-fold: (1) to serve the general education needs of all students, (2) to provide specialized preparation needed for working in geography and planning related fields, and (3) to meet the particular needs of students in the arts and sciences and in professional studies. The discipline attempts to assist students in comprehending the broad scope of our physical/cultural environment and relationships to human situations and problems. As a discipline, geography provides a way of developing skills and of organizing knowledge from various disciplines, and enables students to examine the integrated whole of a people with reference to habitat and interspatial relationships.

There are three emphases provided in the Bachelor of Arts geography degree: traditional (regional courses and cultures), data analyst, and urban/regional planning. The data analyst and urban/regional planning emphases are skill development areas of study. Internships are available and are recommended in those areas.

### BACHELOR OF ARTS — GEOGRAPHY

1. General Requirements, see pages 30-32. 51 s.h.
2. Foreign Language/Culture Requirement 0-15 s.h.
3. Additional Social Science Courses (in each of 3 disciplines not selected under General Requirements) 9 s.h.
4. Geography Core Requirements 34 s.h.
   Required: GEO 102, 103, 225, 326, 400, 404 (19 s.h.)
   Geography electives (under advisement) (15 s.h.)
5. Cognate Courses 15-18 s.h.
   Courses (under advisement) which are specifically related to identified career aspirations, and chosen outside General Requirements, or Geography Core.
6. Free Electives 4-19 s.h.

### GEOGRAPHY AND PLANNING MINOR

The minor program in planning has been developed to afford students the opportunity to enhance progress in a major field through the acquisition of valuable skills; thereby preparing themselves for more than one career track. Minimum of 18 s.h. required. This minor may be taken as a concentration by students in the AA program.

Required Course: GEO 214

Elective Courses (Under Geography/Planning advisement from the following courses): GEO 210; GEO 212 *or* 320; GEO 216; GEO 225 *or* 401; GEO 322; GEO 324 *or* 326 *or* 330; and GEO 328; GEO 403; GEO 415.

---

## COURSE DESCRIPTIONS

GEOGRAPHY
Symbol: GEO

★ **101 World Geography (3)** The scope of geography and its special place in the cultural spectrum Human society is examined in a frame of spatial, environmental, and resource factors. Emphasis is placed on the development of skills in the use of the "tools" of geography.

**102 Physical Geography (3)** The study of basic principles of physical geography and of relationships between components of the total earth environment.

★ **103 Human Geography (3)** An inquiry into the theoretical and applied approaches to the study of human spatial behavior and the distribution of social problems.

**200 Patterns of World Cultures (3)** An examination of selected, non-western areas, representing different stages of development, in the contemporaneous world. Emphasis is placed on cultural adaptation, innovation, and achievement of human occupants of these areas. Prerequisite: ANT 102.

**204 Introduction to Urban Studies (3)** An examination of the breadth of urban studies from the perspectives of many social science disciplines. Special emphasis is placed on Philadelphia as an objective of perception, as a place of life and livelihood, and as an example of continual change of the urban environment. PREREQ. ENG 121

**205 Geographic Influences in American History (3)** Geographic characteristics which bore prominently on the discovery and colonization of America, and on the progressive development of the United States up to the 20th century.

**210 Population Problems (3)** The dynamic processes of population change (fertility, mortality, and migration) and the resultant changes in population distribution and composition In addition to substantive study of these topics, students are introduced to use of primary data sources for demographic description and policy recommendation

**212 Urban Growth Dynamics (3)** Analysis of patterns, processes, and consequences of urban growth and development. Theory of systems, size, spacing, and functions of cities.

★ Approved distributive requirement course.

**214 Introduction to Planning (3)** The method of analyzing problems of urban and regional planning. Emphasis is placed on systems of housing, recreation, transportation, industry, and commerce.

**216 Planning for Public Service (3)** A study of the quality of individual life. Analysis of geographic variation in social well being, problems of social systems monitoring, and social indicators used in planning.

**220 Location of Economic Activity (3)** Introduction to basic theoretical models of agricultural, industrial and settlement geography. Emphasis is placed on fundamental methods of geographic analysis.

**225 Map and Aerial Photo Interpretation (4)** A laboratory course designed to develop skills in and promote an understanding of maps and aerial photos. Offered in fall.

**230 Conservation of Natural Resources (3)** An inquiry into the type, size, and distribution of natural resources, and into the problems of resource management. Emphasis is placed on the United States.

**232 Environmental Crises (3)** The nature and dimensions of environmental problems with emphasis on endangered life-support systems. Aspects of natural and social environment systems, and their mutual interrelationships.

**236 Climatology (3)** Climatic variation on the earth and their classification into regional types. Relationships of plants, soils, and cultures to types of climate. PREREQ: GEO 101.

**301 Anglo America (3)** A regional study of the United States and Canada; human adjustment to and interaction with physical environment. Emphasis is placed on relations between the two nations.

**302 Latin America (3)** Middle and South America are studied with emphasis on understanding the major sources of change in recent times There is focus on 3-4 specific countries in addition to presentation of the region as a whole.

**303 Europe (3)** A regional study of Europe, excluding the U.S.S.R and its satellites, includes a macro-study of the continent, and sequential micro-studies of culturalized landscapes.

**304 The Soviet Union (3)** A regional study of European and Asiatic U.S.S.R. with analysis of geographic factors in relation to strengths and weaknesses as a major world power. PREREQ. GEO 101.

**320 Land Use Planning (3)** An inquiry into the development of comprehensive land use studies by governmental and private agencies, emphasizing the development of skills in problem identification and resolution. PREREQ: GEO 214 or equivalent.

**322 Land Development Controls (3)** An insight into the why and how of land development, emphasizing the role of local government in zoning, subdivision regulation, and other land regulations. PREREQ: GEO 214

**324 Data Systems for Planning (3)** An inquiry into primary data sources needed in the planning process, emphasizing appropriate applications and actual limitations of data. PREREQ: GEO 214.

**326 Geographical Analysis (3)** Applications of basic statistical techniques to problems of spatial significance, emphasizing the adaptation of technique to problem, and the understanding and interpretation of specific analytical methods as applied to real-world situations.

**328 Computer Graphics (3)** Designed to develop skills in the design and use of analytical and computer-mapping systems, the course emphasizes the techniques of spatial problem-resolution and display. PREREQ. GEO 225.

**330 Population Analysis (3)** A course designed to develop skills in demographic research, emphasizing interrelationships of population processes, use and limitation of data sources, and the understanding and interpretation of specific demographic and related analytical methods. PREREQ: GEO 210.

**338 Computer Applications in Social Research (3)** The use of existing and student-generated programming software in the design and execution of social research.

**400 Senior Seminar in Geography (3)** The study of historical and contemporary trends in geography; the design, preparation, and defense of a research proposal.

**401 Cartography (4)** A laboratory course to develop proficiency in the design, construction, and appropriate application of maps and map related graphics. Offered in spring. PREREQ. GEO 225

**403 Presenting Planning Information (3)** Selected experiences designed to assist the student (either as an individual, or as a member of a group) in developing proficiency in information-providing techniques.

**404 Senior Project in Geography (3)** The exe-

cution of the research proposal (designed in GEO 400) as an acceptable departmental senior research paper. PREREQ: GEO 400.

**410 Independent Studies in Geography (3)** Research projects, reports, and readings in geography. PREREQ: permission of department chairperson.

**415 Internship in Geography and Planning (3-15)** Practical job experience in applying geographic theory, executing substantive research, and engaging in community service in selected off-campus situations. Open only to upper-division B.A. majors and minors in geography/planning.

## Political Science

### BACHELOR OF ARTS — POLITICAL SCIENCE

The B.A. degree in political science is designed for those with interest in understanding their society and the world. It has the same broad relevance as other liberal arts degrees and special relevance for careers in such fields as pre-law, politics, public relations, and journalism. Internships may be arranged.

1. General Requirements, see pages 30-32 — 51 s.h.
2. Foreign Language/Culture Requirements — 0-15 s.h.
3. Additional Social Science Courses in each of 3 disciplines not selected under General Requirements plus History 152 — 12 s.h.
4. Political Science Requirements — 33 s.h.
   - A. American Government and Politics (PSC 100) and Foundations of Political Science (PSC 200)
   - B. One Course in each of the following six fields: International Relations, Political Behavior, Political Theory, Comparative-Government, American Government, and Public Administration
   - C. Political Science Symposium (PSC 399)
   - D. Senior Project (PSC 401)
   - E. Two additional political science courses above the 100-level
5. Additional Free Electives — up to 30 s.h.

### BACHELOR OF ARTS — INTERNATIONAL RELATIONS

The international relations concentration is intended for the student who wishes to deepen his or her understanding of world affairs. It is appropriate for students planning careers in areas related to international affairs as well as pre-law, politics and journalism.

1. General Requirements, see pages 30-32 — 51 s.h.
2. Foreign Language, Intermediate level — 0-12 s.h.
3. Political Science Requirements
   - A. Core: PSC 100 or 121, 200, 213, 217, 399, 401 — 18 s.h.
   - B. Required Cognate: HIS 357 — 3 s.h.
   - C. Additional International Cluster (2 of the following): PSC 256, 315, 316, 317 — 6 s.h.
   - D. Related Political Science (3 of the following): PSC 246, 340, 341, 342, 343, 348 — 9 s.h.
4. Related Cognates (five courses in at least four disciplines): May substitute up to six additional hours of foreign language beyond the 202 level; HIS 330, HIS 331, GEO 200, GEO 210, ECO 337, ECO 338, SOC 376, SOC 275, ANT 102, SPC 409 — 15 s.h.
5. Additional Free Electives — up to 30 s.h.

### POLITICAL SCIENCE MINOR

Students may minor in political science generally or in one of the sub-fields such as international relations. This minor is open as an area of concentration under the A.A. degree. Students take PSC 100 plus five courses in a concentrated area or areas under departmental advisement. Total required hours: 18.

### COURSE DESCRIPTIONS

POLITICAL SCIENCE
Symbol: PSC

**★ 100 American Government and Politics (3)** Devoted to understanding how the system works: political action, elections, interest groups, civil liberties, Congress, the presidency, and the courts are among the topics considered. Seeks to provide a framework in terms of which process and current issues become meaningful. Each semester

**★ 121 Introduction to Government and Politics (3)** Survey of fundamental concepts in political science. Considers nature of the state, freedom, sovereignty, equality, theories of representation, other areas. Each semester. Non-majors only.

**200 Foundations of Political Science (3)** Introduction to specialties within the discipline. These include political philosophy, political behavior, public policy, international relations, comparative politics, and methodological approaches taken by political scientists. Majors only.

**204 Introduction to Urban Studies (3)** An examination of the breadth of urban studies from the perspectives of many social science disciplines. Special emphasis is placed on Philadelphia as an object of perception, as a place of life and livelihood, and as an example of continual change of the urban environment. PREREQ: ENG 121

**★ 213 International Relations (3)** Politics among nations, including politics carried on through international organizations. Examines power politics, techniques of diplomacy, and methods of current international organizations. Special attention to U.S. interests and policies.

**215 Politics of the Law in Society (3)** Nature, functions, limits, and sources of the law as an instrument of social and political control and direction. The political and social base and consequence of the development of the law as it applies to the poor, the ecology, property, contracts, torts and the criminally accused.

**217 American Foreign Policy (3)** Cultural, political, economic, and psychological influences on policy; process of decision making. Special attention to a few policy areas such as relations with allied, underdeveloped, revolutionary, or Communist countries. Possible response to threats of war, population growth, resource shortages, and pollution may be examined.

**246 Soviet Politics (3)** Marxism-Leninism, the functioning of the political system and its domination of all areas of Soviet life. Some brief attention to the conduct of Soviet foreign policy.

**252 Civil Liberties and Civil Rights (3)** A survey of the sources of civil liberties and civil rights in the United States with an inquiry into contemporary problems and their solutions through statutory and constitutional developments.

**256 Energy and the Political Process (3)** Stresses the process of policy making and implementation in the field of energy. Emphasis is also given to foreign policy and natural security implications.

**301 Women in Politics (3)** The role of women in politics is surveyed. Considerations include the relationship between the sexes as it impacts politics.

**311 Soviet Foreign Policy (3)** Emphasis on Soviet-American relations since 1945 and a comparison of the two societies. Topics treated include influence of Marxism, Great Russian nationalism, and historical experience on Soviet foreign relations.

**315 War or Survival (3)** Examines the use of military force, and the economic, social and political impact of militarization, and nuclear weapons strategy. Considers arms control and disarmament, alternative security systems and the citizen's role.

**316 World Order: Problems, Approaches, and Prospects (3)** Examines global interdependence, conflict and cooperation regarding contemporary and future world problems (nationalism, resources, etc.). Considers alternative approaches to cooperation and means of bringing about change.

**322 Public Opinion, Propaganda, and Political**

★ Approved distributive requirement course

**Behavior (3)** The dynamics of opinion formation and change; the role of public opinion in policy formation; political socialization, survey research and political socialization, survey research and propaganda techniques considered.

**323 Racial and Ethnic Politics (3)** This course examines the relationship between racial and ethnic groups' political behavior and the American political system's response to them in the sense of public policies.

**324 American Political Parties (3)** Patterns, functions, and history of the American political party system at national, state and local levels. Theoretical and empirical studies of political interest groups, public opinion and voting behavior

**329 Judicial Behavior (3)** A behavioral approach to the law, with specific reference to conceptual, methodological and ideological considerations. Depending on availability of information, roleplaying simulations with students becoming judges and attorneys.

**338 Introduction to Political Thought (3)** Great political thinkers of Western Civilization from Plato to the present. Historical background of Western thought and its relevance to the present political world

**339 Contemporary Political Thought (3)** Consideration of major political thinkers since Marx Includes writings and political significance of Marcuse, Fromm, Lenin, Trotsky, and the Democratic Socialists.

**340 Latin American Culture and Politics (3)** Comparative analysis of contemporary Latin-American systems. Political cultures, decision-making, ideologies, political processes. Emphasis in on Mexico and Central America

**341 Politics of Non-Western Areas (3)** Emphasis on the general problems of nation-building political participation, and elite-mass relationships in the less developed nations. African nations, Latin American or Asian may be emphasized. PREREQ: PSC 100 or equivalent.

**342 Government and Cultures of Western Europe (3)** Primary attention focuses on France, West Germany, and Great Britain; secondary attention on other European systems. Political cultures, popular participation, political parties, and formal institutions of government PREREQ PSC 100 or equivalent

**343 Culture and Politics of Asia (3)** Study of cultural, philosophical and political systems of modern Asia with special emphasis on China, Japan and India

**348 African Culture and Politics (3)** The political nature and practices of individuals, organizations, and government of Black Africa are examined in the cultural context of the contemporary independent period PREREQ: PSC 100 or equivalent.

**349 Comparative Communism (3)** Comparative analysis of the ideological, political, social, and economic systems of Communist nations. Concentration is on comparisons between the Soviet Union and Communist China, but other Communist systems are considered. PREREQ: PSC 100 or equivalent

**350 American Constitutional Law (3)** The development of the American constitutional system as reflected in leading decisions of the United States Supreme Court Emphasis on national powers, federalism, and the Bill of Rights. PREREQ. PSC 100 or consent of instructor

**355 Congressional Politics (3)** Deals with the internal and external factors which influence Congressional behavior, includes the role of the constituents, pressure groups, parties, the committee system, rules and the leadership. Relationships to president and court structure and impact of electoral politics also considered. Comparisons with state legislatures

**356 American Public Policy (3)** Actual policy; its information and execution. Policy areas considered vary from semester to semester May include role playing simulation. PREREQ: PSC 100 or 101 or permission of instructor

**359 The American Presidency (3)** In-depth analysis of the nature and significance of the American presidency, including constitutional development, presidential roles and customs, the recruitment process, the executive branch, and the politics of the presidency. PREREQ At least a "C" in PSC 100 and junior level status or instructor's permission

**399 Political Science Symposium (3)** Nature of research in political science. Construction of a research design Extensive reading in an area of political science Each semester.

**400 Senior Seminar in Political Science (3)** Research in political science. Methodology, bibliography, and presentation, both oral and written The research paper for the seminar must be acceptable as a required departmental senior research paper

**401 Senior Project in Political Science (3)** Execution of the research design constructed in PSC 399 Involves completion of a major senior paper under supervision of a staff member Extensive independent effort. PREREQ PSC 399 Each semester

**410 Independent Studies in Political Science (1-3)** Research projects, reports, readings in political science. Open to seniors only PREREQ: permission of instructor

**412 Internship in Political Science (3-15)** Upper level student field placement learning Short term 3 to 6 hour experiences in political settings under faculty advisement, and 9 to 15 hour placements in state, federal, local governmental/public serving agencies. Learning contracts and faculty advisement create a whole experience from exposure to government administration and political interface Each semester.

## Political Science/Public Administration

### BACHELOR OF ARTS — POLITICAL SCIENCE/PUBLIC ADMINISTRATION

The B.A. degree in political science with a concentration in public administration is interdisciplinary and intended to prepare students for a variety of possible alternatives in state, local, and national government as well as with private interest groups. The program features internship experiences with participating agencies.

1. General Requirements, see pages 30-32 — 51 s.h.
2. Foreign Language/Culture Requirements — 0-15 s.h
3. Additional Social Science Courses (in each of 2 disciplines not selected under General Requirements) plus History 152 — 9 s.h.
4. Public Administration Concentration — 21-27 s.h.
   PAD 364, 374, 361 or 363, 375 or 376, 377, 378, GEO 214, 320, 322
5. PAD 412 Internship — 0-15 s.h.
6. Political Science Symposium (PSC 399)
7. Senior Project (PSC 401)
8. PSC 100, 200 and one additional course at 200 or 300 level — 9 s.h
9. Cognate Requirements — 6 s.h.
   MAT 103 or MAT 121, SPC 230 or SPC 208
10. Additional Free Electives — up to 24 s.h

### POLITICAL SCIENCE: MINOR IN PUBLIC ADMINISTRATION

Students take PSC 100 and five additional courses in public administration under departmental advisement This minor is open as an area of concentration under the A A degree.

COURSE DESCRIPTIONS
POLITICAL SCIENCE/PUBLIC ADMINISTRATION
Symbol: PAD

**361 State and Local Government (3)** Examination of the organization, functions, and politics of state and local government, including analysis of politics in states, counties, cities and towns in urban, suburban and rural areas. Intergovernmental relations in education, transportation, and welfare policy are examined
**363 Urban Government (3)** Structures and processes of central city and suburban government are considered Examines patterns and trends in governmental organization and administration as well as sources of conflict in urban decision making, e.g., the urbanization process, race and class antagonism, and city-suburban perspectives.
**364 Elements of Public Administration (3)** Considers public administration in the United States as a process of implementing public policy. Uses case studies and projects with texts focusing on organizational theory, human behavior and motivation, budgeting, personnel, and administrative responsibility. Each semester.
**369 Politics of Bureaucracy and Administrative Behavior (3)** In-depth examination of the fourth branch of government Impact of the administration apparatus (bureaucracy) on public policy formulation and implementation. Case studies and student projects.
**373 American Intergovernmental Relations (3)** Designed to familiarize students with the complex network of conflict, cooperation and interdependence among national, state and local government units. Topic areas, among others, include an analysis of the continuing evolution of American federalism; an examination of this relationship from state and city government perspectives; and a description of specific intergovernmental fiscal programs and policies.
**374 Municipal and Administrative Law (3)** An in-depth examination of the impact of municipal law and local regulation and its social, economic, and political impact. Attention to such areas as zoning.
**375 Government Finance (3)** Policy choices for public sector economic activity National, state and local activities in allocation, distribution, stabilization functions; grants-in-aid, taxation, student projects in revenue studies. PREREQ. PAD 364, ECO 101 or 111
**376 Government Budgeting (3)** Institutions and processes of budget formulation, authorization, and implementation at national, state, and local levels. Varying formats for budgets, line-items, PPBS, Zero-base, PDS will be developed by students for some unit of government. PREREQ. PAD 364, ECO 101 or 111
**377 Government Personnel and Management (3)** Examination of governmental recruitment practices, including current personnel classification and compensation policies, as well as government selection, recruitment, and promotion procedures. Managerial functions of oversight, supervision and motivation are heavily emphasized. Recommended PREREQ. PAD 364
**378 Public Organizations: Theory and Practice (3)** Nature of public organizations such as government agencies, the environment of their operations, relations to public and private organizations, theories of their structure and behaviors, stressing the public setting and political processes which provide their functioning environment.
**412 Internship in Public Administration (3-15)** Same as PSC 412, but students with public administration concentration must meet PREREQ: PAD 364 Each semester.

## Social Studies With Concentrations in Political Science and Geography

Students interested in teaching any, or all, secondary school social studies may pursue a concentration in political science or geography while earning state certification and the Bachelor of Science in Education degree. See description under Social Studies page 113.

# Health

Franklin Young, *Chairperson*
**PROFESSORS:** Lemcke, Nowack, Nye, Young
**ASSOCIATE PROFESSORS:** Fisher, Goetz, Mustalish, Sheehan, Steinmetz, Voss, Weber
**ASSISTANT PROFESSORS:** Boyle, Harris
**ADJUNCT PROFESSORS:** D'Angelo, Dorris, Leroy, Robbins, Theurkauf

The Department of Health offers four programs leading to a Bachelor of Science degree and also offers an Associate of Science degree in respiratory therapy.

1. The B.S. in HEALTH EDUCATION prepares an individual to teach in schools K through 12th grade. Upon completion of 129 credits, the students take the mandated examination to certify teachers in Pennsylvania. Students passing the exam will receive an Instructional Level I Certificate to teach health education
2. The B.S. in PUBLIC HEALTH is designed to provide students with the competencies needed for a career in public health education in hospitals, health departments, health agencies and industry.
3. The B.S. in PUBLIC HEALTH ENVIRONMENTAL prepares students for careers as environmental health scientists in industry, consulting firms, government and academia. The program synthesizes a rigorous general scientific preparation with specialized applied courses in a wide range of environmental health science disciplines.
4. The B.S. in HEALTH SCIENCE is for students who have completed a certificate or associate's degree program in such health science areas as dental hygiene, respiratory therapy, occupational therapy, medical technology and cardiovascular technology. The program gives professionals the chance to build on their technical education already received and to develop academic competency in a related field
5. The A.S. in RESPIRATORY THERAPY is offered in association with Bryn Mawr Hospital. Graduation from the program plus 12 months of clinical experience in the field satisfies the entrance requirement for the Written Registry Examination and the Clinical Simulation Examination given by the NBRC. Successful completion of these examinations qualifies the candidate as a registered respiratory therapist. Most R.T.'s are employed by hopsitals and home health care agencies.

## ACADEMIC POLICIES

1. Repeating Courses.
   Health Department majors who earn a D or F in selected program requirements must repeat such courses and earn a C or better. To obtain a list of those courses which must be repeated, contact your advisor, the program coordinator (school health, public health, environmental health) or the chairperson of the department.
2. Overall Grade Point Averages for Student Teaching, Internships, and Field Experiences.
   A. A minimum 2.5 cumulative grade point average is required of all school health education majors for student teaching assignments.
   B. A minimum 2.3 cumulative grade point average is required of all public health and environmental health majors for internship or field experience assignments.

   For students not meeting these requirements, supplementary course work will be advised.

## REQUIREMENTS COMMON TO THE B.S. PROGRAMS

General Requirements 51 s.h.

## BACHELOR OF SCIENCE — HEALTH EDUCATION

1. Health Education Core 46 s.h.
   HEA 100, 103, 204, 206, 242, 303, 304, 306, 308, 330, 404, 405, 410, 440.
2. Professional Education Requirements 21 s.h.
   EDF 100, EDP 250, EDA 241, EDP 351, EDM 300, EDE 352, EDE 406.
3. Cognate Requirements 11 s.h.
   SPC 101, BIO 100*, 209, 309, CHE 102*, CSC 101*, PSY 100*, PHI 180*, SOC 200*

*Satisfies General Education Requirements.

## BACHELOR OF SCIENCE IN PUBLIC HEALTH

1. Required Public Health Core 51 s.h.
   HEA 100, 103, 204, 241*, 242*, 303, 306, 330*, 341*, 342*, 350, 410, 420*, 421*
2. Cognate Requirements 31 s.h.
   CHE 103-104†, CRL 103-104, BIO 110*†, 209*, 214*, 309*, MAT 121*†, CSC 101*†, SWO 200
3. Health Electives
   Selected under advisement from HEA 104, 105, 106, 107, 109, 110, 111, 206, 310, 320, 435.

*HEA 241, 242, 330, 341, 342, 420, 421, BIO 110, 209, 214, 309, MAT 121, CSC 101 must be passed with a grade of "C" (2.0) or better.
†CHE 103, 104, BIO 110, MAT 121, CSC 101 satisfy general education requirements.

## BACHELOR OF SCIENCE — PUBLIC HEALTH (ENVIRONMENTAL HEALTH)

1. Environmental Health Core 24 s.h.
   HEA 341, 350, 451, 455, 456, or 457.
2. Environmental Health Electives 14 s.h
   Students choose one of the following options:
   A. Environmental Quality/Public Sector
      HEA 360, 363, 364, 365, 435, 459, 461, 462, 463.
   B. Environmental Quality/Occupational Sector
      HEA 365, 435, 452, 453, 454, 458, 459, 460.
   C. General
      Any combination of the above courses taken under advisement.
3. Cognate Requirements 52 s.h.
   CHE 103*, 104*, 231-232, CRL 103, 104, 232, BIO 110*, 214, BIL 110, 214, MAT 121* CSC 101*, PHY 130-140, ESS 201 or 240 or 490.

*Satisfies General Education Requirements

## BACHELOR OF SCIENCE — HEALTH SCIENCE

1. Satisfactory completion of an allied health certificate, diploma, or A.S. degree program.
2. Satisfactory completion of 128 semester hours, including
   a) 51 s.h. of general education
   b) Complete a minimum of six (6) coordinated courses or 18 s.h. approved by an advisor. Suggested concentrations include: community health, respiratory therapy, dental hygiene, neonatal/pediatric health, or health management

## ASSOCIATE OF SCIENCE — RESPIRATORY THERAPY

1. General Requirements 18 s.h.
   ENG 120, MAT 105, PHI 180, PSY 100, SPC 101, and the Arts.
2. Respiratory Therapy Requirements 37 s.h.
   HEA 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269.
3. Cognate Requirements 22 s.h.
   BIO 214, BIL 214, BIO 309, CHE 103, 104, CRL 103, 104.

## MINOR IN HEALTH SCIENCES

1. **Individualized**
   a. General Required Course: HEA 100
   b. Electives: 15 hours selected under advisement
   c. Gerontology required courses:
      HEA 100, HEA 106, HEA 204, HEA 303, HEA 320, SOC 364
2. **Allied Health**
   a. **Physical Ed/Ed Concentration Majors**
      Required Courses: HEA 100, 201, 202, 206, 306
      Plus 3 hours of HEA electives selected under advisement
   b. **Physical Education/SDC Majors**
      Required Courses: HEA 100, 201, 202, 206
      Plus 3 hours of HEA electives selected under advisement
   c. **Athletic Training Majors**
      Required Courses: HEA 100, 201, 202, 206, 303
      Plus 3 hours of HEA electives selected under advisement

## COURSE DESCRIPTIONS

HEALTH

Symbol: HEA

**100 Dimensions of Wellness (3)** Fundamental concepts of health and wellness exploring several health related areas with an opportunity for personal lifestyle change conducive to better health

**103 Addictives (3)** Thorough study of all addictives in relation to the individual and society.

**104 Human Sexuality (3)** Study of sexuality as it relates to self; the interrelationships with persons

**105 Consumer Issues (3)** Study of consumer issues today that relate to the field of health.

**106 Contemporary Issues in Living and Dying (3)** Current controversial issues including death and dying. How involved persons cope with death.

**107 Parenthood Education (3)** Examining the role of the parent, improvement of parent-child relationships.

**109 Health Issues of Women (3)** The needs and concerns of women as consumers in our present health care system. Various biological, psychological, and social topics will be discussed.

**110 Transcultural Health: Principles and Practices (3)** This course examines the health beliefs and practices of a variety of subcultural groups in the U.S. Emphasis is placed on the application of multicultural health beliefs to the caring process It utilizes the cross cultural approach in meeting the health needs of clients and families It is open to all college students, regardless of major, as a free elective.

**111 Stress Management (3)** Comprehensive survey of stress concepts, stress theory, and stress management techniques. Emphasis is placed on personal application

**201 Health Education I (3)** Fundamental knowledge of major health content.

**202 Health Education II (3)** Fundamental knowledge of major health content.

**203 Criminal Justice Health (3)** Prepares the student to recognize health problems, and to perform effectively in emergency health-related situations.

**204 First Aid for Health Professionals (3)** Prepares students entering the professional field of health to meet emergencies requiring first-aid procedures.

**206 Human Development (3)** Study of growth from conception through adolescence from the mental, emotional, and physical viewpoints.

**211 First Aid for Children (1)** Safety and CPR for early childhood or elementary education majors

**241 Introduction to Public Health (3)** A study of the components, functions, and interrelationships that are parts of any program and/or organization in public health

**242 Community Health (3)** Community health problems and services considered on the local, national, and international levels Includes practical experience

**250 Bronchopulmonary Hygiene (3)** An in-depth study of respiratory care modalities utilized in the maintenance of bronchopulmonary hygiene including humidity and aerosol therapy, sustained maximal inspiration, IPPB therapy, chest physical therapy and airway maintenance Also includes an overview of respiratory anatomy

**251 Oxygen Therapy (2)** An overview of basic science relevant to respiratory therapy is followed by the study of the manufacture, storage, and transport of medical gases, regulators, and metering devices, oxygen therapy, and oxygen analysis

**252 Medical Terminology (1)** An introduction to medical terminology using a programmed instruction, self-learning technique. Includes chart format, word parts, and pulmonary terminology and abbreviations.

**253 Aspects of Respiratory Therapy I (2)** A discussion of topics essential to the provision of comprehensive respiratory therapy. Topics include patient care, sterilization, respiratory pharmacology, and CPR.

**254 Clinical Practice I (1)** An introduction to clinical respiratory care consisting of rotations through patient care areas followed by discussion of experiences and correlation to didactic work.

**255 Pulmonary Function Evaluation (2)** A comprehensive study of various pulmonary function evaluation techniques. Includes bronchoscopy and arterial blood gas analysis.

**256 Mechanical Ventilation (3)** A comprehensive study of mechanical ventilation including the physiology of positive pressure breathing, techniques of ventilation, characteristics of commonly used ventilators, and monitoring of the ventilator-patient system.

**257 Respiratory Physiology (2)** An in-depth study of breathing mechanics, pulmonary circulation, ventilation/perfusion ratios, regulation of ventilation, and gas transport

**258 Aspects of Respiratory Therapy II (2)** A continuation of HEA 253 Topics include pediatrics, rehabilitation, home care, adminstration/organization, and principle of health education

**259 Clinical Practice II (3)** Clinical rotations through patient care areas. Performance evaluations of basic therapies to include humidity and aerosol, oxygen devices, sustained maximal inspiration, IPPB therapy, chest physical therapy, and suctioning.

**260 Cardiopulmonary Diseases (2)** A comprehensive study of cardiopulmonary diseases and treatment. Includes pulmonary diagnostic procedures.

**261 Respiratory Therapy Seminar I (2)** An in-depth discussion of critical year-one topics designed to strengthen and synthesize student understanding of these areas.

**262 Clinical Practice III (1)** An intensive exposure to patient care with rotations through all patient care areas Students complete rotational packets consisting of clinical performance evaluations, objectives, audio-visual material, and reading assignments.

**263 Cardiopulmonary Evaluation (3)** An in-depth study of monitoring techniques including invasive and non-invasive blood gas monitoring, hemodynamic monitoring, and related equipment. Emphasis on interpretation of data

**264 Clinical Practice IV (3)** An introduction to specialized respiratory care areas. Includes rotations through floor care areas with an emphasis on time management and comprehensive respiratory care.

**265 Pediatric/Neonatal Respiratory Care (2)** A comprehensive study of neonatal and pediatric respiratory care including fetal lung development, pathophysiology of the neonate and pediatric patient and related respiratory care procedures.

**266 Pharmacology (2)** An in-depth study of various drug categories including drug-dose response and principles of absorption, distribution, metabolism, and excretion

**267 Clinical Correlation Symposium (2)** Case study presentations with correlation of diagnostic data including PFT's, ABG's, Chest x-ray Includes manipulation of mechanical ventilator parameters and monitoring devices

**268 Respiratory Therapy Seminar II (1)** An in-depth discussion of critical respiratory therapy topics designed to strengthen and synthesize the student's understanding of these areas.

**269 Clinical Practice V (1)** Clinical rotations through specialized respiratory care areas. Students complete rotational packets consisting of clinical performance evaluations, objectives, audio-visual material, and reading assignments.

**301 Health for the Elementary Grades (3)** Principles and procedures for meeting the health needs of the child

**303 Nutrition — Weight Control (3)** Practical approach to the role nutrition and dietetics play in improving the quality of our lives, socially, physically, mentally, and emotionally. Dispelling of fads and fallacies

**304 Family Life and Sex Education (3)** Basic concepts and objectives of such a program for students at different age levels Organizing, launching, and evaluating the program.

**306 Preparation for Classroom Teaching (3)** A comprehensive study of the materials available in health education and the techniques for their prompt implementation.

**308 Field Experience in Health Education (1)** Opportunities for observation/experience in health science settings.

**310 Love and Marriage (3)** Defines love and marriage for student and teaches the skills essential to fulfilling those needs.

**320 Positive Aspects of Aging (3)** To describe past, present projected information concerning the aging process in normal human development (Gerontology).

**330 Health Behavior (3)** Individual and group health behavior of children and adults at different levels of wellness and in various settings. Past and current theories of health behavior with methods of application by health professionals will be included.

**341 Chronic and Communicable Diseases (3)** A study of the disease process including causes, effects, and control of selected diseases with an emphasis on disease prevention and health promotion.

**342 Program Planning and Evaluation (3)** Provides an in-depth study of the program planning process and evaluation methods. Needed skills are developed and experience given in writing programs from assessment through evaluation with both hypothetical and real populations.

**350 Environmental Health (3)** Methods of promoting health by controlling environmental factors relating to air, water, wastes, housing, radiation, and industrial hygiene. PREREQ: CHE 104, BIO 110, permission of instructor

**360 Air Quality and Health (4)** A consideration of the types and amounts of air contaminants; the atmospheric processes that transport them; and the role of air quality in human health PREREQ: HEA 350, or permission of instructor

**363 Waste Management (2)** Sources, characteristics, and amounts of solid and hazardous wastes, and their implications for human health; methods of collection, handling, and disposal, recycling PREREQ: HEA 350, or permission of instructor

**364 Food Sanitation (2)** Basic principles of food hygiene, health problems associated with production, processing, and distribution of foods; methods of inspection and supervision PREREQ: HEA 350, BIO 214, permission of instructor

**365 Institutional Environmental Health (2)** Environmental health concepts and problems unique to the institutional setting, schools, colleges, hospitals, nursing homes, mental health facilities, correctional institutions, and health aspects of the

residential environment will also be considered PREREQ: HEA 350, BIO 214, permission of instructor

**400 Advances in Dental Health I (3)** A comprehensive examination and investigation of recent advances in dental health designed for the registered dental hygienist and certified dental assistant.

**401 Seminar in Health (3)** A seminar required of all seniors that are school health and public health majors which involves researching and conducting seminars in the current critical health issues.

**404 Student Teaching: Middle School (6)** Practical classroom experience in teaching health education. PREREQ: HEA 303, 304, 305, 307, 308.

**405 Student Teaching: Secondary School (6)** Practical classroom experience in teaching health education. PREREQ: HEA 404

**408 Dental Hygiene Field Experience (6)** Field experience for dental hygienists who are working towards certification as public school dental hygienists, or preparing to teach in a school of dental hygiene.

**410 Mental Health (3)** Designed to aid persons in improving their understanding of themselves and others. Emphasis on ways to recognize mental health problems.

**420 Preparation for Internship (3)** A comprehensive study and integration of the areas of responsibility for the public health major and their corresponding functions and skills essential for a successful internship.

**421 Public Health Internship (12)** A practical full-time work experience in a hospital, public health agency or industry jointly supervised by an on-site supervisor and a public health faculty member.

**435 Health Workshop (1-6)** Special workshops on contemporary health problems and issues. Topics announced at time of offering.

**440 School Health Program (3)** School health services, environment and instruction, and organization and administration of a school health program.

**451 Toxic Substances (3)** An investigation of the health problems caused by toxic substances primarily in the workplace and also in the general environment. PREREQ: HEA 350, BIO 214, CHE 231 (concurrent); permission of instructor.

**452 Industrial Hygiene (3)** A study of the anticipation, recognition, evaluation and control of health hazards in the work environment. PREREQ. HEA 350, or permission of instructor.

**453 Occupational Safety (3)** A study of the recognition, evaluation and control of safety hazards in the work environment PREREQ: HEA 350, or permission of instructor.

**454 Safety Management (3)** The management of safety programs including program planning and evaluation, legal requirements, recognition, evaluation and control of hazards, education and training programs, fire protection, personal protective equipment, and hearing conservation will be discussed PREREQ: HEA 350, 453, or permission of instructor

**455 Environmental Health Seminar (3)** In-depth investigation and discussions on topics of particular concern or significance to the environmental health field. Topics will be varied from year to year PREREQ: Senior environmental health major.

**456 Environmental Health Internship (12)** Field placement with an environmental health department in an industry, consulting firm or government agency for all environmental health majors. PREREQ. Senior environmental health major.

**457 Environmental Health Field Experience (12)** Field placement with an environmental health department in an industry, consulting firm or government agency for all environmental health majors. PREREQ. Senior environmental health major

**458 Industrial Fire Safety (3)** The health effects, causes, types and control of industrial fires are investigated Program organization and management, personal protection and extinguishing methods and their respective problems are discussed PREREQ: HEA 350, or permission of instructor.

**459 Engineering for Health and Safety (3)** The students will learn the various environmental health control strategies and the theoretical bases for these strategies. The students will also improve their quantitative skills solving problems concerning the control of environmental health and safety hazards. Cost effectiveness as well as technical effectiveness will be discussed PREREQ. HEA 350, 452, or permission of instructor.

***460 Industrial Hygiene Techniques (3)** Evaluation techniques for monitoring the industrial environment will be learned in a laboratory setting as well as in the field. These techniques will include monitoring of air quality, air flow, noise, heat stress, and radiation. Evaluation of personal protective equipment, pulmonary function testing and audiometric testing will also be investigated. PREREQ: HEA 350, 452, or permission of instructor

**461 Introduction to Watersheds (3)** An introduction to the concept of watersheds and a discussion on how waterborne disease agents are distributed within a drainage basin. Emphasis is placed on methods of assessing pollution of water resources.

**462 Water Quality and Health (4)** An examination of the quality and quantity requirements of surface and subsurface water resources used for drinking water supplies. Drinking water treatment techniques are detailed. Laboratory. PREREQ. HEA 350, HEA 452 or permission of instructor

**463 Wastewater Systems (4)** An evaluation of the human health implications of liquid wastes; sources, waste characteristics, treatment and disposal will be considered Laboratory PREREQ HEA 350, HEA 452 or permission of instructor

**470 Advances in Respiratory Therapy I (3)** A comprehensive examination and investigation of recent advances in respiratory therapy designed for the registered respiratory therapist

* A laboratory fee may be charged.

# History

Richard J. Webster, *Chairperson*

Harry G. Schalck, *Assistant Chairperson*

**PROFESSORS:** Burgwyn, Crowley, Foster, Fox, Harding, Heston, Johnson, Riley, Schalck, Sessa, Shur, Soldon, Stuart, Swan, Turner, Webster, Young

**ASSOCIATE PROFESSORS:** Doyle, W. Peters

The student of history seeks to recreate the past (or, more precisely, as much of it as possible) not only rationally to explain and understand the past for its own sake, but also to identify our age with earlier times. The student is concerned with the origins and development of and relationships between past people and events and, from the multiplicity of credible and sometimes conflicting evidence, renders judgments on causation and consequences. He or she seeks to achieve a sense of the past. Among the careers open to history majors are the law, government service, teaching, research, journalism, and business. Indeed, a strong preparation in history can lead to possibilities in virtually every field of endeavor. The Department of History office is 506 Main Hall; the telephone number is (215) 436-2201.

**BACHELOR OF ARTS — HISTORY**

| | |
|---|---|
| 1. General Requirements, see pages 30-32 | 51 s.h. |
| 2. Foreign Language Requirement | 12-15 s.h. |
| 3. Social Science and Elective Core | 18-21 s.h. |
| 4. History Concentration Requirements | 30-33 s.h. |

HIS 102, 151, 152 (9 s.h.) and HIS 101 taken under general requirements
Senior Seminar (HIS 400) (3 hrs.)
Group 1 — American History (6 hrs.)
HIS 344, 345, 352, 353, 354, 357, 358, 360, 361, 364, 366, 370, 373, 451, 455, 462, 474
Group 2 — European History (6 hrs.)
HIS 219, 220, 324, 330, 331, 333, 345, 420, 421, 422, 423, 425, 426, 427, 435, 447

Group 3 — World and Regional History (6 hrs.)
HIS 218, 301, 305, 309, 311, 312, 315, 316, 317, 348
History Electives (3 hrs.)

5. Cognate Courses 12-15 s.h.
Four cognate courses selected from literature, art, philosophy
6. Additional Free Electives to complete 128 s.h.

### BACHELOR OF SCIENCE IN EDUCATION — SOCIAL STUDIES

**Concentration in History**

Students interested in teaching secondary school social studies may pursue a concentration in history while earning state certification and the Bachelor of Science degree. See description under SOCIAL STUDIES: B.S. IN EDUCATION, page 113. All students in history programs must complete HIS 101-102 and HIS 151-152.

### HISTORY MINOR

Students may obtain minor recognition on their transcript so that their concentrated choice of free electives will be recognized. This minor may be taken as a concentration by students in the AA Program.

| | |
|---|---|
| Required Courses: one course among HIS 100, 101, or 102 and one course among HIS 150, 151, or 152 | 6 s.h. |
| Elective Courses, chosen under advisement, from three groups: American, European, World and Regional History (6 s.h. in one group; 3 s.h. in each of the others) | 12 s.h. |
| | 18 s.h. |

---

## COURSE DESCRIPTIONS

HISTORY

Symbol: HIS unless otherwise shown

***100 Mainstreams in History (3)** The historical backgrounds of the modern era examined through a variety of topics and concepts.

**†101 History of Civilization I (3)** Man's cultural elements and social institutions in the West and the East from earliest times through the Renaissance.

**†102 History of Civilization II (3)** Developments in civilizations from 1500 to the present, with emphasis on Western Civilization and its interrelationships with the non-Western world.

**126 History of Utopias (3)** Study of the history of Utopias and Utopian schemes from Plato's Republic to contemporary American communes. Utopia, both as an antidote for reality, and as a seed-bed for social, political, and economic reform.

**145 The Jew in History (3)** Review of the four thousand years and five civilizations which have welcomed the Jewish people, emphasis on the Jews in contemporary society.

**146 The Holocaust (3)** Focuses on ethnic, nationalistic, economic and religious causes, 20th century Nazism, racism, anti-Semitism, and the Nuremberg trials.

**150 The American Experience (3)** The history of the United States, with emphasis upon major themes, ideas, and developments — nationalism, sectionalism, imperialism, industrialism and others.

**151 History of United States I (3)** The social, economic, political, and intellectual development of the United States from the beginning of the Colonial period through the Civil War

**152 History of United States II (3)** The social, economic, political, and intellectual development of the United States from 1865 to the present, with emphasis on the new industrialism and on foreign affairs.

**161 Violence in America (3)** A study of violence in American society both as an instrument of change and a method of social control

**166 20th Century America (3)** A survey of the United States since 1898. Emergence of the nation as a world power is stressed.

**167 Popular Culture in Twentieth-Century America (3)** Survey of the history of modern American popular culture and arts, and their impact on our society. Popular literature, the motion picture industry, popular music and the mass media are explored.

**218 The Ancient World (3)** Classical Greece and Rome with consideration of economic, social, intellectual, and political history. Selected writings of the ancients.

**219 Medieval Europe (3)** Western Europe from the fall of Rome to approximately 1300. Economic, social, political, and intellectual developments in the major kingdoms of the West, the history of the Universal Church

**220 Renaissance and Reformation (3)** Political, economic, social, and cultural forces which emerged in Europe, 1300 to 1650. The evolution of modern states and the rise of the middle class.

**301 History of South Asia (3)** A historical study of developments on the Indian subcontinent (India and Pakistan), the course also considers those areas of Southeast Asia (Burma and Thailand) which have been traditionally influenced by the course of Indian events.

**305 History of East Asia (3)** Survey of the historical and cultural background of China, Japan, and Korea. Emphasis is given to the significance of the modern period of East Asia and its impact on world affairs.

**309 History of Middle East (3)** Recent history of the major Middle Eastern countries. Geographical, cultural, economic, and religious factors which have influenced the history of the area. Special attention to Middle East problems which affect international relations.

**311 History of Africa to 1800 (3)** A survey of the traditional culture and the historical development of the African continent prior to the 19th century Emphasis is upon the length and diversity of Africa's history prior to European colonization.

**312 History of Sub-Saharan Africa Since 1800 (3)** A survey of Black Africa's developments in the 19th and 20th centuries. Emphasis is upon Africa's colonial experience as the background for the emergence of independent Africa

**315 History of Latin America to 1825 (3)** Pre-Columbian period, colonial Latin America and movements for independence; Indian, European, and African backgrounds; government, economy, society, religion, culture, and enlightenment. Interaction of diverse cultures in New World

**316 History of Latin America Since 1825 (3)** Latin America in 19th and 20th centuries; liberalism, conservatism, dictatorship, revolution, socialism, industrialization, agrarian reform, cultural-intellectual achievements, and international relations. Topical approach, using individual countries as case-history illustrations.

**317 History of Mexico (3)** Mexico from Pre-Columbian period to present including civilizations of Mayas and Aztecs, Spanish conquest, Colonial period, movement for independence era of Santa Ana, La Reforma, Diaz dictatorship, Mexican Revolution, cultural-intellectual achievements, international relations, and modernization of Mexico since the Revolution.

**324 Russian History to 1917 (3)** Russian history from 9th century Kiev to the end of the Imperial period Major emphasis on the continuing religious, economic, social, and political tradition peculiar to the Russian State.

**330 Conflicts in Modern Europe (3)** Power politics in Europe; alliances and counteralliances; imperialism, First World War and Versailles peace settlements; emergence of totalitarian ideologies.

**331 20th Century Europe (3)** European fascism and communism; totalitarianism confronts liberalism; interaction between domestic politics and foreign policy; polarization of European politics; disintegration of the political institutions of the traditional state.

**333 European Economic History (3)** European demographic and technological change; trade unions; agriculture; trade; the entrepreneur; distribution of income and welfare from 10th century to the present.

**344 History of Pennsylvania (3)** The founding and development of Pennsylvania from its Colonial beginnings to the present, with emphasis on the relation of the past to the present

**345 Oral History (3)** An examination of contemporary history by making taped interviews of the reminiscences of people involved in recent political events; human right movements; local or national issues, etc.

**348 The Bible in History (3)** The Bible as a historical record From the Pentateuch, through the prophetic literature, the Apocrypha, the Pseudepigrapha, the Dead Sea Scrolls to the New Testament.

★Approved Distributive Requirement Course
†HIS 101-102. Approved two-semester substitute for distributive requirement

Historical records of the ancient Near Eastern civilizations will be compared with Biblical sources.

**352 Modern American Military History (3)** The role of the American military in shaping the course of the nation in the twentieth century.

**353 Artifacts and Culture (3) (also ANT 260)** Patterns of American civilization explored through study of the material culture.

**354 U.S. Labor History (3)** History and analysis of labor organizations; labor and government; labor and political parties; women and children and minority groups in labor organizations; the strike; technology and labor, Big Labor

**357 Diplomatic History of the United States (3)** The theory and practice of American diplomacy from Colonial times to the present with emphasis on the 20th century.

**358 Economic History of the United States (3)** The economic development of the American nation as it evolved from a frontier, agricultural country into an urban, industrial power.

**360 Technology and American Life (3)** Promises and practices of American life in response to the interaction of American forms, values and scientific-technological change from the Colonial period to the present.

**361 Constitutional History of the United States (3)** The development of the Constitution of the United States from the Philadelphia convention to the present with emphasis on major supreme court decisions.

**364 U.S. Urban History (3)** A survey of the rise of the American city from early Philadelphia to the modern metropolis. The recurring themes of growth, immigration, social mobility, city politics, city planning, urbanism, and suburbanism.

**366 The Turbulent Sixties (3)** Examination of the stress and conflict in American politics, arts, literature, and society of the 1960's.

**370 American Indians (3)** A survey of Indian civilization on the continent of North America and the confrontation of this civilization with white culture.

**373 Afro-American History (3)** The Afro-American: origins, period of slavery, industrialization of the South, migration to northern urban centers, civil rights movements, and the evolution of "Black Power."

**400 Senior Seminar in History (3)** Research in history. Methodology, historiography, and presentation, both written and oral. The research paper for the seminar must be acceptable as a required departmental senior research paper Required of all history majors.

**410 Independent Studies in History (1-3)** Research projects, reports, readings in history. Open to seniors only. PREREQ: Permission of department chairperson

**420 Women in Modern Europe (3)** Lives and careers of women in the 19th and early 20th centuries through autobiographies. The problem of women's self-image and sense of identity.

**421 History of England to 1688 (3)** The British people and their institutions from Roman times to the Glorious Revolution with primary emphasis on the Tudor and Stuart periods.

**422 History of England Since 1688 (3)** England as a world leader during the Commercial and Industrial Revolutions, the evolution of the democratic process, and the emergence of liberalism followed by the democratic welfare state.

**423 Modern Germany (3)** Germany in the 19th and 20th centuries: Napoleonic era, rise of Prussia, nationalism and unification, imperialism and World War I, National Socialism, World War II, and divided Germany.

**425 Soviet Russia (3)** Political, economic, social, and cultural aspects of Soviet society in the light of traditional Russian patterns and the goals of Communism.

**426 History of Modern Italy (3)** A study of Italian unification, the Era of Liberalism, Fascism, and post World War II developments.

**427 Modern France: 1789 to Present (3)** French Revolution; Napoleon; Bourgeois France; Third Republic; The Great War and Versailles; Nazism and the Popular Front, The Collapse of 1940; The Fourth Republic; The DeGaulle Era.

**435 European Intellectual History Since 1800 (3)** Ideas and the arts in modern European history, from Romanticism to Existentialism.

**447 Jesus and Marx (3)** The relationship between Christianity and Marxism from the confrontation and contradiction of the nineteenth century to the coexistence and cooperation of the twentieth century.

**450 Internship in History (1-3)**

**451 Women in America (3)** American women's daily routines, social roles, and search for rights and identity since Colonial days. Recent goals, values, and conflicts.

**455 American Intellectual History (3)** Political and economic thought, theology, science, philosophy, literature.

**460 Field Studies in History (3)**

**462 Social and Cultural History of the United States (3)** The evolution of American society with emphasis on the impact of improving material conditions upon labor, the arts, education, religion, social mores, and family life The changing status of women, blacks, and immigrants.

**474 American Religions (3)** The comings and goings and changes of American religion from the Pilgrims of New England to the cults of California.

# Honors Program

Walter J. Hipple, *Director*

The University provides outstanding students the opportunity to participate in a challenging and stimulating Honors Program and receive appropriate recognition if they complete the requirements. The Honors Program comprises two tiers: Honors in General Education and University Honors.

"Honors in General Education" appears on a certificate awarded to a student who completes a series of six specially designed seminars. Ordinarily these are completed before achieving junior status. The honors student selects at least one seminar in each of the following areas:

1) Mathematical and Natural Sciences;
2) Social Sciences;
3) Fine Arts and Humanities (including history).

These courses may be taken in lieu of the corresponding standard general education courses offered by the University.

"University Honors" appears on a certificate awarded to a student who completes the requirements of both the lower and the upper tier of the Honors Program. The upper-tier requirements comprise two junior-level interdisciplinary seminars and a senior project. In recent semesters, the interdisciplinary seminars have included such topics as "Future Energy Alternatives," "History of Utopias," "The Arts from 1900 to 1920," "Humor," "Elizabethan England," "Death and Dying," "Male and Female Language," "Ethics, Humanism, and Science." Students who do not enter the program until the third year can earn a certificate in "Junior-Senior Honors" by completing the upper tier only.

Students seeking "University Honors" are also normally expected to attain either proficiency in the reading of a foreign language or proficiency in university mathematics.

Admissions and retention in the Honors Program are determined by a student-faculty Honors Council.

Further information about the requirements of the Honors Program, together with information about currently available honors seminars and the extracurricular activities of the Honors Program, is available from the director in Main Hall 131.

# Instructional Media

Joseph M. Spiecker, *Chairperson*
**PROFESSORS:** Strayer, Spiecker
**ASSOCIATE PROFESSOR:** Redmond
**ASSISTANT PROFESSORS:** Reis

## APPLIED MEDIA TECHNOLOGY PROGRAM IN INSTRUCTIONAL MEDIA

The Applied Media Technology Program, which results in an Associate of Science degree, is a two-year program consisting of an interrelated series of courses in photography, filmmaking, television, multi-image, sound recording, design, and graphic production of visual materials.

The student will develop a specific roster of skills which are employable in almost every segment of our society including education, business, government, medicine, law enforcement, and industry.

General academic requirements of the University must be met for admission and the candidate must satisfactorily complete 64 credit hours of required and elective courses.

### ASSOCIATE OF SCIENCE — APPLIED MEDIA TECHNOLOGY

1 **General Requirements** 18 s.h
ENG 120, MAT 103, SPC 101, PSY 100 or PSY 265, CSC 101 or CSC 114 or CSC 141, fine arts requirement.

2. **Required Courses** 40 s.h.
EDM 202, 213, 223, 225, 226, 228, 230, 231, 233, 234, 275, 290, SPC 202 or JRN 225.

3. **Electives** 6 s.h.

## MINOR PROGRAM OF STUDY IN INSTRUCTIONAL MEDIA

Current trends have increased the need for trained personnel in the field of instructional technology.

Personnel trained in this field may obtain a position either in industry in the training and development center, public relations department, or in education providing a service function in the instructional media department.

Students will be required to develop a broad range of skills and knowledge relative to the use of media and technology.

Students selecting a minor in instructional media must complete the following eighteen credit hours of required courses: EDM 300, EDM 423, EDM 425, EDM 430, EDM 475 and EDM 433. Interviews will be made upon request.

## COURSE DESCRIPTIONS

INSTRUCTIONAL MEDIA
Symbol: EDM

**202 Selection and Effective Utilization of Media (3)** This course will engage the student in a systems approach to the design of training packages, emphasizing the criteria for the selection of media to lead students effectively to the fulfillment of training objectives. It will also involve the most effective ways to utilize the media selection. For associate degree students.

**203 Mediated Programs (3)** This course will explore the area of visual communication materials. Through the use of research materials, demonstrations, and various production techniques, the student will be able to design and produce visual instructional materials. The materials produced will be relevant to either the group or individualized instructional process reflected in current trends and methods of curriculum design.

**213 Production of Multi-Image Programs (3)** The multi-image presentation, perhaps more than any other means of communication, offers endless possibilities for creative expression. This course will attempt to acquaint the student with the how and why of multi-image presentations. The student, through hands-on experience, will research, design, and produce several programs which utilize the multi-image techniques. For associate degree students.

**223 Design and Production of Visual Materials (3)** This course will explore the areas of design as they relate to the production of visual instructional materials to be utilized as an integral part of the curriculum. The phases of perception, communication, and learning theories are covered as they involve a teaching approach with the subject matter specialist and the educational media specialist in determining advantages, limitations and use of various visual educational media. For associate degree students.

**225 Basic Photography (3)** A workshop stressing the photographic process. The course will cover camera handling, film and print processing, and application of photography to media production and the development of training packages. For associate degree students. Student must supply adjustable 35 mm camera plus developing and printing materials.

**226 Intermediate Photography (3)** A workshop for those who have had a basic photography course or previous photographic experience. The course will stress a technical and creative approach to black and white and color photography with small format cameras and will involve advanced techniques of exposure, lighting composition, macro photography and film and print processing. For associate degree students. Student must supply adjustable 35 mm camera plus developing and printing materials.

**228 Advanced Photography (3)** Course designed for students interested in learning professional techniques of black and white and color photography. General areas considered will be large and medium format cameras. Specific consideration will be camera equipment, lenses, filters, retouching, available light, and electronic flash photography, composition and advanced darkroom techniques. For associate degree students.

**230 Motion Picture Production I (3)** A workshop in scripting and shooting of 16mm film. For associate degree students.

**231 Motion Picture Production II (3)** Course geared as a follow-up course for Motion Picture Production I. Particular attention is paid to 16mm equipment, editing, sound recording, laboratory and processing procedure, color, and television application. Emphasis will also be placed on camera angle, continuity, cutting, close-up, composition, credits and release. For associate degree students.

**233 Basic TV Production I (3)** This course deals with the history and development of commercial and instructional television in the United States. It will include a study of closed circuit systems and the equipment and practices to operate such a system. The student will gain experience in planning and producing instructional or promotional television programs. For associate degree students.

**234 TV Production II (3)** A television studio production course emphasizing the practical work of all aspects of closed circuit television. It will include presentation of scripts, graphics, animation,

photos, film, slides, sound recordings, lighting, staging and electronic technical information For associate degree students.

**235 Instructional TV Production III (3)** A course designed for the advanced undergraduate student in television production The ten minute television productions are basic requirements of the course. The student will use the television production facilities of West Chester University to complete the basic TV production requirements For associate degree students.

**275 Sound Reproduction in Instructional Communication (3)** A combination theory and workshop course that will teach the theory of sound and its application in instruction For associate degree students.

**290 Internship (4-15)** Internship/Field Experience will give students an opportunity to gain practical experience in the field of media technology at their level. Areas where students might be placed are· schools, colleges (2 and 4 years), industry, TV stations, photo labs, etc

**300 Introduction to Instructional Communications (3)** Techniques, materials and equipment, and the development of skills in their use in teaching.

**402 Selection and Effective Utilization of Instructional Media (3)** This course will engage the student in a systems approach to course development emphasizing the criteria for the selection of media to lead students effectively to the fulfillment of course objectives. It will also involve the most effective ways to utilize the media selected.

**403 Developing Mediated Individualized Instructional Programs (3)** Involves the development by students of individualized instructional packages utilizing various forms of media The packages will be developed using a systems approach and emphasis will be on interactive video and computer assisted instruction.

**405 Theory of Motion Picture Production (3)** Lecture integrated with extensive use of films to teach the basic functions of the educational film and attempt to cite results to demonstrate the effective use of films used in the classroom.

**413 Production of Multi-Image Production (3)** The multi-image presentation, perhaps more than any other means of communication, offers endless possibilities for creative expression. This course will attempt to acquaint the student with the how and why of multi-image presentations. The student, through hands-on experiences will research, design and produce several programs which utilize the multi-image techniques.

**423 Design and Production of Visual Materials (3)** This course will explore the areas of design as they relate to the production of visual instructional materials to be utilized as an integral part of the curriculum. The phases of perception, communication and learning theories are covered as they involve a teaching approach with the subject matter specialist and the educational media specialist in determining advantages, limitations and use of various visual educational material

**425 Basic Photography (3)** A workshop stressing photographic processing, camera handling and the film and print processing. Students must have complex camera and must purchase personal supplies.

**426 Intermediate Photography (3)** A course designed for students who have had the basic photography course and wish to sharpen previously learned skills and acquire more advanced skills in picture taking, film and print processing and print finishing.

**428 Advanced Photography (3)** Course designed for students interested in learning professional techniques regarding black and white and color photography. General areas considered will be large, medium and 35mm format camera. Specific consideration will be camera equipment, lenses, filters, retouching, available light and electronic flash, composition, and advanced darkroom techniques.

**430 Motion Picture Production I (3)** Scripting and shooting of 16mm film including magnetic sound recording and reproduction

**431 Motion Picture Production II (3)** Course geared for the advanced filmmaker interested in learning the professional techniques for producing 16mm sound film Particular attention is paid to 16mm equipment, editing, sound recording laboratory and processing procedure, color and television application PREREQ. EDM 430 — Motion Picture Production I.

**433 Basic TV Production I (3)** This course deals with the history and development of commercial and instructional television in the United States It will include a study of closed circuit systems and the equipment and practices to operate such systems. The student will gain experience in planning and producing instructional or promotional television programs.

**434 Instructional TV Production II (3)** A lecture, demonstration and workshop course designed for the classroom teacher The course stresses the planning, writing, producing and evaluation of instructional television. Emphasis is placed on student involvement in the television production process

**435 Instructional TV Production III (3)** This is a course designed for the advanced undergraduate student in television production The course will allow students to produce three, fifteen-minute television productions on topics of their own choice. The student will assume the role of a TV director and producer and will accept independent responsibility for the TV productions.

**463 Field Study of Media Programs (3)** A scheduled group or individual tour, foreign or domestic, in which students investigate notable installations or projects in educational media

**475 Sound Reproduction in Instructional Communications (3)** A combination theory and workshop course that will teach the theory of sound and its application in instruction

**498 Workshop in Instructional Media (3 or 6)**

# Interdisciplinary Programs

Richard J. Webster, *Coordinator*

West Chester University offers two interdisciplinary programs leading to a Bachelor of Arts degree

American Studies and
Comparative Literature Studies

and six interdisciplinary programs leading to transcript recognition

Ethnic Studies
Latin American Studies
Linguistics
Peace and Conflict Studies
Russian Studies
Women's Studies

These programs offer students the opportunity to develop a synthesis of knowledge from several disciplines. Drawing upon professors from across the campus, the programs are directed by a Committee of Interdisciplinary Programs under the aegis of the Dean of the Faculty of Arts and Sciences.

More information about these programs may be found under their individual listings.

# Latin-American Studies

Erminio Braidotti, *Coordinator*

Any student in the University, regardless of his or her area of specialization, may earn a minor and a letter of verification in Latin-American Studies after satisfactory completion of 18 semester hours of work, distributed as follows:

**LATIN AMERICAN STUDIES**

| | | |
|---|---|---|
| Required: Either A or B | | 18 s.h. |
| A. | 1. Spanish or Portuguese (Intermediate level or above) | 6 s.h |
| | 2. Latin-American History | 6 s.h. |
| OR | | |
| B. | 1. Latin-American History | 6 s.h |
| | 2. Latin-American Civilization and Thought | 6 s.h. |

**Electives:** As advised, from Latin-American-oriented courses offered by the Departments of Anthropology and Sociology, Government and Planning, Economics, Art, or other departments of West Chester University. In track A, one three (3) credit course must be devoted to literature, art history, or music. 6 s.h.

For advising, see Professor Braidotti in the Department of Foreign Languages or Professor Crowley in the Department of History.

A student should maintain a 2.5 average in area-studies courses to be recommended for graduate work in the area-studies concentration.

# Liberal Studies

In addition to programs leading to the baccalaureate degree in a specific academic field, the University offers a baccalaureate degree in liberal studies. The keynote of the baccalaureate degree in liberal studies is its flexibility. Students in this program are permitted to take courses designed to meet their particular vocational or educational needs. The program may be quite broad for those who seek a generalist education or sharply focused on a topic or area which cuts across the boundaries of traditional academic disciplines. The liberal studies degree is especially attractive to those intellectually mature students who can profit from the exercise of planning and completing their own personally designed programs of study. Typically, a student interested in the Liberal Studies Program selects the undeclared major if entering the University as a freshman. Upon achieving sophomore status a student may apply for admission into the Liberal Studies Program. The student must be in good academic standing.

**BACHELOR OF ARTS OR BACHELOR OF SCIENCE — LIBERAL STUDIES/GENERAL**

| | |
|---|---|
| 1. General Requirements, see pages 30-32 | 51 s.h. |
| 2. Two or more minors approved for this program | 30-63 s.h |
| 3. Upper-division coursework (300-level and above) (May be used to meet the requirement of Point 2.) | 36 s.h. |
| 4. For B.A. degree: Foreign Language | 0-15 s.h |
| 5. Free electives to total 128 | |

All candidates for Bachelor of Arts degree must fulfill the University's foreign language requirement, a language at the 202 level. The B.A. or B.S. degree candidate must complete the last 30 credits at the University as a major in the program.

**BACHELOR OF ARTS/BACHELOR OF SCIENCE — LIBERAL STUDIES/INDIVIDUALIZED**

| | |
|---|---|
| 1. General Requirements, see pages 30-32 | 51 s.h. |
| 2. Individually designed major programs approved by the Liberal Studies Advisor | 50-70 s.h. |
| 3. Upper-division coursework (300-level and above) (May be courses in the major program of Point 2.) | 36 s.h. |
| 4. For B.A. degree: Foreign Language Requirement | 0-15 s.h. |
| 5. Free electives to total 128 | |

**ASSOCIATE OF ARTS — LIBERAL STUDIES**

The University also offers a program of study leading to the Associate of Arts in liberal studies. This program is especially suited for students who want a solid foundation to move ahead into a wide variety of fields including business, the sciences and public service. The program consists of a set of general education courses and 15 to 21 hours in an area of concentration. The specific requirements and the range of available areas of concentrations are outlined on pages 32-33. Students who select one of these areas of concentrations receive their academic advice from a faculty member of the program or department responsible for that area of concentration. Students may also choose to develop an individualized area of concentration with the guidance and assistance of an advisor in the Academic Advising Center. Approval for an individualized Associate of Arts concentration must be obtained from the liberal studies advisor prior to completion of 45 credit hours of the program.

# Linguistics

Joseph Falgie, Jr., *Coordinator*

CONTRIBUTING FACULTY
Diane O. Casagrande, *Speech Communication and Theatre*
W. Stephen Croddy, *Philosophy*
Stephen D. Gilmour, *Foreign Languages*
John T. Kelly, *English*
Willie E. Page, *English*
Frederick R. Patton, *Foreign Languages*
Elizabeth Smith, *English*
Philip D. Smith, Jr., *Foreign Languages*
Paul Stoller, *Anthropology and Sociology*
Robert H. Weiss, *English*

The minor in linguistics is an interdisciplinary program contributed to by the Departments of Anthropology and Sociology, Communicative Disorders, English, Foreign Languages, Philosophy, and Speech Communication and Theatre. Its purpose is to provide the student with a foundation in the analysis of the various aspects of language. Students wishing to enter the program must consult Dr. Falgie. To receive credit for the minor in linguistics, a student must complete 18 semester hours of course work. All courses must be approved by the coordinator.

**MINOR — LINGUISTICS**

1. Required Courses 9 s.h.
   ENG/LIN 230, ENG 335 (or any other historical linguistics course),
   ENG 331 (or any other structural grammar course)
2. Electives 9 s.h.
   A. Choose one of the following.
      ENG 330, FRE 365, GER 365, RUS 365, SPA 365, SPP 106, or any other approved course in phonology or phonetics.
   B. Choose one of the following.
      ENG 339, ENG 340, LIN 250, ANT/LIN 380, PHI/LIN 330, PHI/LIN 360, SPC/LIN 415, or any other approved comparable course.
   C. Choose an additional course from either Group A or B above or choose one of the following: ENG 430, LAN 250, LIN 411, LIN 412, LIT 430, LIT 431, PHI 190, PHI 436, PHY 110, SPC 250, SPP 107, or any other approved linguistics course.

# Mathematical Sciences

John W. Weaver, *Chairperson*
Frank Milliman, *Assistant Chairperson*
**PROFESSORS**: Branton, Fabrey, Filano, Grosshans, Koh, L'Heureux, Mandelbaum, Montemuro, Weaver
**ASSOCIATE PROFESSORS**: Ahlborn, Kerrigan, Milito, Milliman, Morgan, Moser, Seybold, Verno, Wolfson
**ASSISTANT PROFESSORS**: Edelman, Schremmer, Szymanski, Wiener

The Department of Mathematical Sciences offers two programs leading to the Bachelor of Arts degree in mathematics, two programs leading to the Bachelor of Science degree in computer and informational sciences, and a program leading to the Bachelor of Science in Education.

1. The B.A. in MATHEMATICS enables each student to receive the basic preparation for the career of his/her choice, such as college teaching, research and other service in industry and government, and computer programming. In all cases, the student receives a sound preparation for graduate study in the field of mathematics.
2. The B.A. in MATHEMATICS: COMPUTER SCIENCE offers the student interested in both mathematics and computer science an opportunity to study both disciplines.
3. The B.S. in COMPUTER AND INFORMATION SCIENCES requires course work in computer science, mathematics and business. In addition, the student gains valuable experience on the job through an internship program with local industry and business. Normally, this program requires attendance during one summer session in addition to the 8 academic semesters. The *Information Systems* track prepares the student to use the computer as a tool for management in business and industry (systems analyst). The *Computer Systems* track prepares the student to engage in the design, development and effective use of computer systems through emphasis on software and computer system structure (systems programmer).
4. The B.S. in EDUCATION in MATHEMATICS focuses on a heavy concentration in mathematics while the student earns state certification to teach secondary school mathematics.

Majors in all these areas should consult the appropriate department handbook and review with their advisors current requirements listed on the guidance record sheets.

### REQUIREMENTS COMMON TO THE B.A. PROGRAMS

1. General Requirements — 51 s.h.
2. Foreign Language Requirement — 0-12 s.h.
3. Related Requirements: — 7 s.h.
   CSC 141; PHY 170
4. Major Requirements: — 23 s.h.
   MAT 110, 141, 142, 241, 242, 343, 421

### BACHELOR OF ARTS — MATHEMATICS

1. Additional Major Requirements — 9 s.h.
   MAT 211, 232, 411
2. Electives in Mathematics — 12 s.h.
   Selected from upper division mathematics courses
3. PHY 180 — 4 s.h.

### BACHELOR OF ARTS — MATHEMATICS WITH COMPUTER SCIENCE CONCENTRATION

1. Additional Major Requirements: — 15 s.h.
   MAT 425; CSC 142, 241, 242, 490 (3 s.h.)
2. Electives in Mathematics — 6 s.h.
3. Electives in Computer Science — 6 s.h.

### BACHELOR OF SCIENCE — COMPUTER AND INFORMATION SCIENCES

1. General Requirements — 51 s.h.
2. Core Curriculum
   - Computer Science Requirements — 20 s.h.
     CSC 141, 142, 241, 242, 361 and 5 approved language labs
   - Mathematics Requirements — 15 s.h.
     MAT 161, 162, 261, 221
   - Natural Science Requirements — 9 s.h.
     One semester each of 3 different natural sciences
   - Cooperative Experience — 13 s.h.
     CSC 300, 400
3. Information Systems Track Requirements — 27 s.h.
   CSC 321; ACC 201-202; MGT 301; MKT 301; ECO 101; ENG 368; and 6 s.h. of approved electives in business, computer science or mathematics.
4. Computer Systems Track Requirements — 21 s.h.
   CSC 331, 341; ACC 201; ENG 368; and 9 s.h. of approved electives in computer science and mathematics.

### BACHELOR OF SCIENCE IN EDUCATION

1. General Requirements — 51 s.h.
2. Mathematics Requirements — 38 s.h.
   MAT 110, 141, 142, 211, 231, 241, 242, 343, 350, 354 (credited to professional education), 411, 421
3. Professional Education Requirements — 27 s.h.
   EDF 100; EDP 250, EDM 300; EDP 251; EDS 306; EDS 411-412
4. Related Requirements — 11 s.h.
   PHY 170-180; CSC 141
5. Electives in Mathematics — 9 s.h.
   Selected from upper division mathematics courses

### MINOR IN MATHEMATICS

Baccalaureate students may receive transcript recognition for a minor area of study in mathematics by completing 4 required courses and 2 electives selected from the approved list.

Required Courses

MAT 110, MAT 141, MAT 142, MAT 211

Alternate Required Courses

MAT 105, MAT 161, MAT 162, MAT 211

Approved Electives: Select 2

MAT 232, MAT 343, MAT 411, MAT 421

### ADVANCED PLACEMENT POLICY

A score of three (3) on the Mathematics Advanced Placement Exam of the College Boards will allow a mathematics major to begin his/her studies with MAT 142. MAT 110 may or may not be taken at the discretion of the student. Students who are granted advanced placement of 3-6 s.h. take 3-6 additional s.h. of electives in mathematics.

---

## COURSE DESCRIPTIONS

MATHEMATICS

Symbol: MAT

**MAT 000 Fundamentals of Algebra (3)** A preparatory course to remediate basic arithmetic and algebraic skills. Students scoring below 450 on the mathematics SAT and who do not pass the mathematics test during their orientation program are placed in this course prior to any other mathematics course. Credits earned in 000 level courses do not count towards the 128 hours of credit needed for graduation, but the grade is computed in the cumulative average. The course must be passed with a grade of C− or better, or repeated.

**101-102 Mathematics for Elementary Teachers I-II (3) (3)** Formal development of the natural numbers, integers, rationals, reals, and complex numbers; probability; intuitive geometry. 101 must precede 102. For elementary education majors only.

**103 Introduction to Mathematics (3)** An introduction to the nature and spirit of mathematics and its cultural significance. Designed for general education.

**105 College Algebra and Trigonometry (3)** A unified course in algebra and trigonometry. PREREQ: High school algebra.

**107-108 Calculus for Business I, II (3)(3)** Differential and integral calculus with emphasis on applications. Also includes the study of matrices, determinants, and linear programming using the simplex method. 107 must precede 108.

**110 Foundations of Mathematics (3)** A pre-calculus course. Topics include polynomials, rational functions, inverse functions, theory of equations, circular functions, arithmetic and geometric series, mathematical induction, complex numbers.

**121 Statistics (3)** Basic concepts of statistics. Frequency distributions, measures of central tendency and variability, correlation, probability and theroretical distribution, significance of differences, and hypothesis testing. For non-mathematics majors.

**MTL 121 Statistics Lab (1)** Introduces the student to using and programming the computer to solve statistical problems and to aid the student in understanding statistical concepts. The BASIC language is used.

**141-142 Calculus I-II (3) (5)** Differential and integral calculus of real valued functions of a single real variable. 141 must precede 142.

**161-162 Applied Calculus I-II (4) (4)** Emphasis on problem solving and applications characterize this course in differential and integral calculus. When applicable, computer experiments in APL are introduced to support the theory and application of the calculus. Must be taken in order. PREREQ: Good working knowledge of high school algebra and trigonometry, demonstrated by MATH SAT score of 650 or above, a C (2.0) in MAT 105, or passing the departmental examination in algebra and trigonometry.

**209 Topics in Mathematics for the Elementary Teacher (3)** Introduction to programming in BASIC; computer uses for the classroom teacher, descriptive statistics with applications for teaching, and measurements of length, area, volume and temperature that focus on the SI metric system with practice in the classroom. Additional topics in applied mathematics will be considered. PREREQ: MAT 102. Offered in fall.

**211 Linear Algebra (3)** An introduction to linear algebra. Topics covered include matrices, systems of linear equations, vector spaces, linear transfor-

mation, determinants, eigenvalues, spectral theorem and triangulation.

**212 Algebra for Elementary Teachers (3)** Formal structure of groups, rings, and fields with examples from the elementary curriculum. Topics from linear algebra including matrices, determinants, and linear programming. PREREQ: MAT 102.

**221 Applied Statistics (3)** Probabilities, discrete and continuous probability distributions, methods of estimation and hypothesis testing, linear regression. PREREQ: CSC 141 (or equivalent) and MAT 162 (or equivalent).

**231 Foundations of Geometry (3)** Geometric foundations from an advanced viewpoint. Topics are chosen from euclidean and non-euclidean geometries. Offered in spring.

**232 Differential Geometry (3)** Classical differential geometry from a modern viewpoint. Curves and surfaces; shape operators; introduction to Riemann geometry. PREREQ: MAT 242.

**233 Geometry for Elementary Teachers (3)** Modern informal approach to two and three-dimensional geometric figures, measurement, similarity, congruence, coordinate geometry and the postulational method. PREREQ: MAT 102.

**241-242 Calculus III-IV (3) (3)** The calculus of several variables. Topics include series, the algebra and geometry of n-dimensional euclidean space, linear transformations, directional derivatives, integration and Stokes' Theorem. PREREQ: MAT 142. 241 must precede 242.

**261 Applied Calculus III (4)** The calculus and the computer are used to analyze deterministic, axiomatic and probabilistic models. Topics in discrete mathematics are used extensively. PREREQ: MAT 162 (or MAT 142) and CSC 141 (or equivalent).

**321 Combinatorics and Graph Theory (3)** Introduction to set theory, graph theory and combinatorial analysis. Includes relations, cardinality, elementary combinatorics, principles of inclusion and exclusion, recurrence relations, zero-one matrices, partitions, and Polya's Theorem. PREREQ: CSC 101 or CSC 141 and MAT 261 or MAT 242.

**343 Differential Equations (3)** The general theory of nth order, linear differential equations including existence and uniqueness criteria and linearity of the solution space. General solution techniques for variable coefficient equations, series solutions for variable coefficient equations, and study of systems of linear equations. PREREQ: MAT 241. Offered in spring.

**350 Foundations of Mathematics Education (3)** Historical overview of mathematics education with emphasis upon influential curricular programs, implications of learning theory; significance of research; identification of current issues; organizational alternatives for the classroom; evaluation resources. PREREQ: MAT 241. Offered in fall.

**351 Teaching Mathematics in Elementary Schools I (3)** Concepts, learning aids, syllabi, texts, and methods in elementary school mathematics. PREREQ: MAT 101 for childhood studies; MAT 101-102 for elementary education.

**352 Teaching Mathematics in Elementary Schools II (3)** Techniques for teaching children concepts such as geometry in two and three dimensions, number sentences, graphing, ratios and percent, quantifiers, etc.; use of laboratory materials will be emphasized. PREREQ: MAT 351. Offered in spring.

**354 Techniques of Teaching Secondary School Mathematics (3)** Techniques used in the presentation of specific mathematical concepts, associated materials, levels of questioning, motivational devices. Scope and sequence of secondary mathematics topics. Criteria for text evaluation. Preview of student teaching. PREREQ: MAT 350. Usually offered in spring.

**357 Teaching Mathematics to the Handicapped (3)** Methods and materials associated with the presentation of mathematics to the handicapped. Emphasis on individualization involving thinking skills at the concrete level. Evaluative and interpretive techniques are included. PREREQ: MAT 101-102.

**390 Seminar in Mathematics Education (3)** Typical topics are: remedial programs, low achiever programs, materials for mathematics education, methodology in mathematics education, mathematics and the computer, theories of mathematics education, and analysis of research in mathematics education. PREREQ: MAT 351.

**391 Seminar in Mathematics for Elementary Teachers (3)** Topics selected for the relevance and value for the prospective elementary teacher. PREREQ: permission of department chairperson.

**400 History of Mathematics for Elementary Teachers (3)** History and development of elementary mathematics from primitive times to the discovery of the calculus. Problems of the period are considered. PREREQ: MAT 212, 233.

**401 History of Mathematics (3)** Development of mathematics from the Babylonian era to the 18th century. Some modern topics included. PREREQ: MAT 241.

**405 Special Topics in Mathematics (3)** Topics announced at the time of offering.

**411-412 Algebra I-II (3) (3)** Abstract algebra. Algebraic systems; groups; rings, integral domains, and fields. PREREQ: MAT 241. 411 must precede 412.

**414 Theory of Numbers (3)** Properties of the integers; primes, factorization, congruences, and quadratic reciprocity. PREREQ: MAT 242.

**421-422 Mathematical Statistics I-II (3) (3)** Probability theory, discrete and continuous random variables, distributions, moment generating functions. Statistical sampling theory, joint and interval estimation, test of hypothesis, regression, and correlation. PREREQ: MAT 242. 421 must precede 422.

**425 Numerical Analysis (3)** Numerical methods for the approximate solution of applied problems. Interpolation theory, curve fitting, approximate integration and numerical solution of differential equations. PREREQ: CSC 101 or CSC 141 and MAT 261 (or MAT 242).

**427 Introduction to Optimization Techniques (3)** Nature of optimization problems: deterministic and stochastic, discrete and continuous. Computer methods of solution; systematic and random search; linear quadratic, dynamic programming, and others. PREREQ: CSC 101 (or CSC 141) and MAT 261 (or MAT 242).

**432 Topology (3)** Elements of point set topology. Separation axioms. Connectedness, compactness, and metrizability. PREREQ: MAT 242.

**441-442 Advanced Calculus I-II (3) (3)** A rigorous treatment of the calculus of a single real variable. Topics in several real variables and an introduction to Lebesque integration. PREREQ: MAT 242. 441 must precede 442.

**443-444 Applied Analysis I-II (3) (3)** The techniques of analysis applied to problems in the physical sciences. Topics include: partial differential equations, orthogonal functions, complex integration, and conformal mapping. PREREQ: MAT 242. 443 must precede 444.

**445 Complex Variables (3)** Introduction to functions of a complex variable. Analytic functions, mappings, differentiation and integration, power series, and conformal mappings. PREREQ: MAT 242.

**490 Seminar in Mathematics (3)** Topics in mathematics selected for their significance and student-instructor interest. Independent study and student reports, oral and written. PREREQ: senior standing and consent of department chairperson.

**493 Mathematical Modeling (3)** The idea of a mathematical model of a real situation. Techniques and rationales of model building. Examples from the life, physical, and social sciences. PREREQ: MAT 242, 343.

## COMPUTER SCIENCE

Symbol: CSC

***101 Introduction to Computers (Non-Majors) (3)** A course for non-majors dealing with what computers are, what they can do, a brief history of computers, societal implications of computer usage, and how they are used. A brief introduction to a programming language is provided along with hands-on experience using wordprocessing, database, and spreadsheet programs.

***115 Introduction to Computer Programming (Non-Majors) (3)** The art and science of computing is introduced with an emphasis on structured programming. Topics include looping, branching, arrays and program development.

**†141 Introduction to Computer Science (3)** Introduction to the art and science of computing and its applications. Topics covered are: elementary data structures, structured programming techniques, algorithm development, error analysis, and file manipulation. A final substantive programming project is required of each student. PREREQ: 2 years of high school algebra.

**†142 Applied Software (3)** Techniques of program design, documentation and implementation are studied using advanced features of the structured language of CSC 141 (presently Pascal). Emphasis is placed on data storage, data representation, and file structures. PREREQ: CSC 141.

**202 Programming Language Lab — BASIC (1)** Introduction to BASIC with an emphasis on programming. PREREQ: CSC 141. Offered in fall.

**203 Programming Language Lab — APL (1)** Introduction to APL with an emphasis on programming. PREREQ: CSC 141. Offered in spring.

**204 Programming Language Lab — FORTRAN (1)** Introduction to FORTRAN with an emphasis on programming. PREREQ: CSC 141. Offered in fall.

**206 Programming Language Lab — MODULA-2 (1)** Introduction to the MODULA-2 programming language. PREREQ: CSC 141. Offered in fall of even years.

**207 Programming Language Lab — C (1)** Introduction to the C programming language. PREREQ: CSC 141. Offered in fall of odd years.

**208 Programming Language Lab-Forth (1)** Introduction to Forth programming language. PREREQ: CSC 141. Offered in spring of even years.

**209 Programming Language Lab — List processing (1)** Programming skills are developed in a list processing language such as LOGO and/or LISP. PREREQ: CSC 141. Offered in spring of odd years.

★Approved distributive requirement course
†CSC 141-142 Approved two-semester distributive requirement substitute

**210 Programming Language Lab — Software Packages (1)** Skills are developed in the use of various software packages, e.g. spreadsheet, database, graphing. PREREQ: CSC 141 Offered in spring.
**211 Programming Language Lab — COBOL (1)** Programming skills are developed in the COBOL language. PREREQ. CSC 141 or CSC 115. Offered in fall
**212 Programming Language Lab — Advanced COBOL (1)** Continuation of CSC 211. PREREQ: CSC 211 Offered in spring.
**215 Programming Language Lab—PROLOG (1)** Introduction to logic programming using PROLOG. PREREQ: CSC 141 Offered in fall of even years.
**241 Data Structures (3)** Analysis of data structures using PASCAL. Topics include lists, trees, stacks, queues, recursion, and sorting. PREREQ. CSC 141 (or proficiency in PASCAL), CSC 142, MAT 161, or equivalent Offered fall and spring.
**242 Computer Organization (3)** Study of the architecture of a computer system and its native language. Use of assembler language and interfacing with higher level languages is included. PREREQ: CSC 141, CSC 142, CSC 241, MAT 161, (or permission of advisor).
**300 Cooperative Programming (4)** The student works in the application programming section of an information systems group as a junior programmer to gain experience in programming and implementing small projects of use to the company. PREREQ: Written approval of the computer science internship supervisor, CSC 141-142-241-242, MAT 161-162, at least two programming language labs, 2.5 in CSC, 2.0 in MAT (WCU classroom courses). Offered summer pre-session only.
**321 Data-Base Management Systems (3)** Characteristics of generalized data management systems; survey of widely used systems; techniques for improving the interface between a manager and information he needs to make decisions through easy-to-use generalized reporting systems. PREREQ: CSC 142, 241 Offered in fall and spring.
**331 Operating Systems (3)** Operating systems and their user characteristics. Maintenance of a complex operating system with emphasis on important trade-offs made in tuning the system. Core and file management, systems accounting, other user related services. PREREQ: CSC 241, 242, 361, MAT 221, 261. Offered every fall.
**335 On-Line Computing (3)** Characteristics of data communication equipment Design implementation, modification of information systems in an on-line environment. File management systems and data structures appropriate to real-time computing with emphasis on back-up and recovering techniques. PREREQ: CSC 241, 242, MAT 261. Offered in spring.
**341 Compiler Construction (3)** Translation, loading, execution of a higher level language. Syntax analysis of simple expressions and statements. Organization of a compiler; design and implementation of a simple compiler PREREQ: CSC 241, 242, MAT 261. Offered in spring.
**343 Formal Languages (3)** A study of the various types of automata and their associated languages This course is designed to give a student an understanding and appreciation of the production system for languages and their relationship to automata. PREREQ: CSC 241, 242, MAT 221, 261 Offered fall in even years.
**350 Computers in Education (3) (non-majors)** Technical knowledge and skills for successful use of the computer as a supportive tool of education in elementary and secondary school classes. Usually offered summers.
**361 Simulation (3)** Computer simulation utilizing logical, numerical, and Monte Carlo modeling to represent systems. Use of special languages to simulate actual systems. PREREQ: CSC 141 (or equivalent), MAT 261 (or MAT 242), MAT 221 (or equivalent).
**371 Computer Graphics (3)** Construction and manipulation of prototypes for graphical display purposes. PREREQ: CSC 241, MAT 261 (or MAT 242), MAT 211 (or permission of instructor). Offered in spring.
**381 Artificial Intelligence (3)** Thorough study and analysis of the LISP language in its application to non-numeric problems and symbol manipulations. Application to gaming, scene analysis and pattern recognition, linguistic analysis and semantic representation, image analysis and solution spaces, problem solving and attention control. Each student required to take one substantial problem and solve it using the LISP language and the techniques of artificial intelligence. PREREQ: CSC 241, 242, MAT 261. Offered fall of odd years.
**400 Cooperative Specialty (9)** Working for an organization in his or her concentration area, the student applies his or her background to real problems. PREREQ. Written approval of computer science internship supervisor, 2.5 in CSC, 2.0 in MAT (in WCU classroom courses), five programming languages labs, completion of degree requirements during semester of registration.
**490 Independent Project in Computer Science (1-5)** The student designs and implements a software system. Project problems are drawn from local industry and university departments. A computer science faculty member supervises each project. PREREQ: consent of instructor.
**495 Topics in Computer Science (3)** Announced at time of offering. PREREQ: consent of instructor Offered as needed
**499 Independent Study in Computer Science (1-4)** In conjunction with the instructor, the student selects study topics via literature search. PREREQ: consent of instructor

# Military Science (Army ROTC)

West Chester University students are eligible to participate in the Army Reserve Officers' Training Corps (ROTC) Program through a formal cross-enrollment agreement with the Widener University Department of Military Science. Army ROTC offers university students the opportunity to graduate with a college degree and a commission in the United States Army, Army National Guard, or United States Army Reserve. All Army ROTC classes are conducted on the West Chester University campus.

The Army ROTC Program consists of a basic course taken during the freshman and sophomore years, and an advanced course taken during junior and senior years. Successful completion of the basic course is required before placement into the advanced course. Students who participated in Junior ROTC in high school or have prior military service may receive placement into the advanced course as determined by the army professor of military science. The basic course requirement may also be satisfied through attendance of a six-week Army ROTC Basic Camp at the end of the sophomore or junior years. Students enrolled in the advanced course receive a stipend of $100 per month. National Guard and Reserve Forces options are also available.

Nursing students who complete the four-year or two-year program, obtain their Nursing degree, and pass their Nursing Board Examinations are commissioned into the Army Nurse Corps.

Two-year and three-year, full-tuition, Army ROTC scholarships are available on a competitive basis. Scholarships also include payment of certain university fees, a book and school supplies subsidy, and a $100.00 stipend

Application for three-year and two-year Army ROTC scholarships must be submitted early in the spring semester of the freshman or sophomore year (respectively). Applications for attendance to the Army ROTC Basic Camp must be submitted early in the spring semester of the sophomore year.

For further information on scholarship and career opportunities contact the Professor of Military Science, Widener University, Chester, PA 19013, (215) 876-2446 or (215) 499-4097.

COURSE DESCRIPTIONS
MILITARY SCIENCE
Symbol: MSI

**101 Introduction to ROTC (1½)** This introductory course is a study of American military history from the earliest times to present. Other topics include: the organization and history of ROTC; the organization of the Army, military customs, traditions and courtesies; the role of the Army in national security; ethics, and emphasis on the evaluation of military leadership as viewed from the knowledge of the historically tested principles of war. PREREQ: Full-time undergraduate student.

**102 Introduction to ROTC II (1½)** Continued study of the organization and history of ROTC and the evolution of military leadership as viewed from the knowledge of the historically tested principles of war. PREREQ Full-time undergraduate student.

**201 Methods of Instruction (1½)** Practical approach to methods and techniques of instruction. Includes characteristics and principles of instruction, instructor preparation, speech techniques, use of instructional aids, and instruction evaluation through student presentations. Offered first half of semester. PREREQ: MSI 101 and MSI 102 or approval of professor of military science.

**202 U.S. Defense Establishment (1½)** Introductory course covering broad concepts of military science including branches and mission; the structure and functions of the defense establishment; and the military as a profession PREREQ: MSI 101, 102, 201 or approval of the professor of military science.

**301-302 Contemporary Military Principles and Group Dynamics (1.5) (1.5)** A study of leadership and management principles and their universality in the military-civilian environment Examination of traditional and behavioral management concepts, structure, and the interaction of organizations and subsystems. Practical approach to methods and techniques of communication and instruction PREREQ: Army ROTC advanced course standing or approval of professor of military science.

**401-402 Military Organization and Management (1.5) (1.5)** A continued study of leadership and management emphasizing applications in military operations; an analysis of staff organizations and procedures; resources allocation, the theory and application of military law; examination of the role of the military structure in the execution of national security policy; and case study investigations of the duties, obligations, and responsibilities of a commissioned officer PREREQ: Army ROTC advanced course standing or approval of the professor of military science.

# Music

James D. Sullivan, *Director, School of Music*

**PROFESSORS:** Barrow, Cohen, Johns, Laudermilch, Lee, Merrell, Munger, Murray, Nelson, Pennington, Schick, Schmidt, Singleton, Sprenkle, Sullivan, Veleta, Wells, Wilkinson.

**ASSOCIATE PROFESSORS:** Aliferis, Alt, Bedford, Belmain, Boerlin, Dorminy, Frenz, Friday, Gangemi, Guidetti, Hegvik, Klein, Lucas, McVoy, Pandel, Southall, Sweet, Vandever, Voois, Wagner, Whitten, L. Williams

**ASSISTANT PROFESSORS:** Ahramjian (Part-time), Baird (Part-time), Lyons (Part-time), Richter (Part-time), Swartley

**INSTRUCTORS:** Fields, Goebel, Markey, McKenna (Part-time), Sanford (Part-time), Villella (Part-time).

### MUSIC TESTS — BACHELOR OF SCIENCE IN MUSIC EDUCATION

(1) Each candidate must demonstrate skill in at least one performing medium in which he or she excels: piano, organ, voice, guitar, or a band or orchestra instrument. It is preferable, although not required, for pianists and vocalists to perform at least part of their audition from memory.

(2) All candidates are tested in voice and piano.

(3) Piano, organ, or voice majors with band or orchestra instrument experience are urged to demonstrate their ability on their instruments.

Note: All candidates must bring music for the vocal, piano, and instrumental compositions they intend to perform, and should come prepared with a song that will demonstrate vocal range and quality.

### MUSIC TESTS — BACHELOR OF ARTS IN MUSIC

Each candidate must demonstrate acceptable background in a major performing medium.

### MUSIC TESTS — BACHELOR OF MUSIC

Each candidate in performance must demonstrate an advanced level of proficiency in the major area of performance as evidenced by the ability to perform compositions representing a variety of musical periods and must show potential as a professional performer. Memorization is required for pianists and vocalists. Each candidate in theory and music history must demonstrate acceptable background in a major performing area. Candidates in composition must take a sight-singing test in addition to the piano and voice tests and demonstrate an acceptable background in a major performing medium; they must also present scores of completed compositions.

NOTE:
Candidates for the B.A. and B Mus. degrees will also take all of the tests required for admission to the B.S. program

### REQUIREMENTS COMMON TO ALL MUSIC PROGRAMS

| | |
|---|---|
| 1. General Requirements | 38-70 s.h. |
| 2. Theory Requirements<br>MTC 112, 114,<br>113, 115, 212, 214,<br>213, 215 | 20 s.h. |
| 3. Music History Requirements<br>MHL 221, 222 | 6 s.h |

### BACHELOR OF SCIENCE — MUSIC EDUCATION

The B.S. in MUSIC EDUCATION is a balanced program of general, specialized, and professional courses leading to qualification for a Pennsylvania Instructional I Certificate to teach music in the elementary and secondary schools of Pennsylvania. Three teaching concentration programs—general, instrumental, and vocal-choral—are provided. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general, music, and concentration requirements.

| | |
|---|---|
| 1. Required Music Education Courses<br>MUE 331, 332, 333, 335, 431, 432 | 20-21 s.h. |
| 2. Other Music Requirements<br>Major Performing Instrument, Applied music courses, Conducting, Music organizations, MTC 450, Music electives | 46-59 s.h. |
| 3. Education Courses<br>EDF 100, EDP 250 | 6 s.h. |

## BACHELOR OF MUSIC

### REQUIREMENT COMMON TO B.MUS PROGRAMS

Foreign Language 6-12 s.h.

1. The B.MUS in COMPOSITION offers comprehensive theory and composition courses designed to develop creative skills enabling the student to write in an acceptable contemporary idiom and to develop an individual style. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general and music requirements.
   Required Composition Courses 24 s.h.
   MTC 312-413, 341, 342, 344, 346, 417
   Other Music Courses 33 s.h.
   MHL Elective, Conducting, Music Organization, Music Electives, Performance Area
2. The B.MUS in THEORY offers extensive training to develop analytical skills leading to the comprehension of the structure and form of music of all styles and periods, and to develop acceptable writing skills. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general and music requirements.
   Required Theory Courses 21 s.h.
   MTC 312, 341, 342, 344, 346, 417, 479
   Other Music Courses 38 s.h.
   MTC 450, MHL Elective, Conducting, Performance area,
   Music organizations, Music electives
3. The B.MUS in MUSIC HISTORY prepares the student for graduate studies in music history and literature, and musicology. The required courses provide a broad foundation in the major field The wide choice of music electives permits the student to structure a program compatible with his/her particular career goals and interests. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general and music requirements.
   Required Music History Courses 15 s.h.
   MHL 440-445 (four courses), MHL 470
   Music History Electives 12 s.h.
   Music Electives 12 s.h.
   Other Music Courses 13 s.h.
   MTC 342, PIA 101-302, Conducting, Music Organization
4. The B.MUS in PERFORMANCE is for students who demonstrate a high degree of ability on their chosen instrument and who desire to concentrate on developing that ability. Majors in the program should consult the "Handbook for Students in Music—Undergraduate Division" for the current general and music requirements.

### BACHELOR OF MUSIC — INSTRUMENTAL PERFORMANCE

Required Instrumental Courses 39 s.h.
Major instrument 141-442, AIC 311, 312, Band/Orchestra, Master Class/Ensemble
Other Music Courses 29 s.h.
MTC 344, 341, 450, Secondary Applied Music, Major Literature Course, Music electives

### BACHELOR OF MUSIC — KEYBOARD PERFORMANCE/PEDAGOGY

Required Keyboard Courses (Performance) 40 s.h.
PIA 141-442, 405, 406, 425, 426, 450, 452
Other Music Courses 26 s.h.
MTC 344, MHL elective, Conducting, Secondary performance area, Music organization, Master class, Music electives
Required Keyboard Courses (Pedagogy) 44 s.h.
PIA 141-442, 405, 406, 425, 426, 450, 451, 452, 453
Supportive Elective 3 s.h.

### BACHELOR OF MUSIC — VOCAL PERFORMANCE

Required Vocal Courses 44 s.h.
VOI 141-442, 329, 411, 412, 413, 414, 424, Vocal literature course, VOC 311, 312
Other Music Courses 22 s.h.
MTC 344, 450, PIA 191-201, Music electives, Chorus

5. The B.A. in MUSIC is designed for the student interested in the study of music within a liberal arts curriculum. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general and music requirements.
   Required Music History Courses 12 s.h.
   Four courses from MHL 320-322, 440-445, 450-457, 460-462, 479, 480
   One course from MTC 341, 342, 450 3 s.h.
   Other Music Courses 18 s.h.
   Applied music, Music organization, Music electives
   Foreign Language 12 s.h.

### MINOR IN MUSIC

This program is geared toward liberal arts students with an interest in music. The "Handbook for Students in Music—Undergraduate Division" should be consulted for the current general and music requirements.

REQUIRED COURSES 12 s.h
MTC 112, 114, MHL course, Music organization, PIA 191, 192
Music Electives 6-9 s.h.
The "Handbook for Students in Music—Undergraduate Division" should be consulted for current music requirements.

### MINOR IN JAZZ STUDIES

This program is designed primarily for students currently enrolled in a music degree program. Students in other degree programs will be admitted if qualified. Students must have the permission of both their major advisor and the chairperson of the Instrumental Department. The "Handbook for Students in Music-Undergraduate Division" should be consulted for current requirements.

REQUIRED COURSES 18 s.h.
MTC 361, 362, AIM 361, 362, 365, MHL 322, AES 151, 152
Music Electives 0-3 s.h
ACP 193, AEO 121, AES 151, 152

## COURSE DESCRIPTIONS
DEPARTMENT OF MUSIC THEORY AND COMPOSITION
Symbol: MTC

*Harry Wilkinson, Chairperson; Gangemi, McKenna, McVoy, Munger, Nelson, Sanford, Sullivan and Staff.*

**110 Fundamentals of Music (3)** A study of basic elements of music for those without previous musical experience.

**112 Theory of Music I (3)** Fundamentals of music theory, music writing, keyboard harmony. Elements of musical form, binary and ternary forms. Tonic, dominant, leading tone, subdominant, and supertonic triads. Analysis and creative activity.

**113 Theory of Music II (3)** Submediant and mediant triads and their inversions; diatonic seventh chords; modulation; compound ternary, rondo, and variation forms. Analysis and creative activity. PREREQ: MTC 112.

**114 Aural Activities I (2)** Development of basic hearing skills, chiefly through sight singing and dictation activities based upon the subject matter of MTC 112.

**115 Aural Activities II (2)** Continued development of basic hearing skills. PREREQ: MTC 114

**212 Theory of Music III (3)** Diatonic and chromatic seventh chords and their inversions. Modulation. Invention and fugue, sonata-allegro forms. Analysis and creative activity. PREREQ: MTC 113.

**213 Theory of Music IV (3)** Harmonic and contrapuntal techniques of the 20th century. Form in contemporary music. Analysis and creative activity. PREREQ: MTC 212.

**214 Aural Activities III (2)** Material of advanced difficulty involving chromatic alteration, foreign modulation, and intricate rhythms. PREREQ: MTC 115.

**215 Aural Activities IV (2)** Continuation of MTC 214 and activities involving nontonal music. PREREQ: MTC 214

**312 Composition I (3)** Creative writing in the forms, styles, and media best suited to the capabilities and needs of the student. PREREQ: MTC 212.

**313 Composition II (3)** Further application of MTC 312 stressing contemporary techniques. PREREQ: MTC 312.

**316 Performance Practices in Contemporary Music (3)** Technical problems of understanding new notation (e.g. graphic, proportional, multiphonics, microtones, metric modulation, asymmetrical rhythm groupings, prose scores, etc.) and facility in performing scores which include these techniques. PREREQ: MTC 213 or department permission.

**341 Orchestration (3)** The orchestra, use of instruments individually and in combination. PREREQ: MTC 212.

**342 Musical Form (3)** The standard forms of tonal music based on the treatises of Goetchius and Salzer. PREREQ: MTC 212.

**344 Counterpoint I (3)** The contrapuntal techniques of tonal music. Chorale prelude and invention. PREREQ: MTC 212.

**345 Counterpoint II (3)** Advanced contrapuntal forms including canon and fugue. PREREQ: MTC 344

**346 Techniques of Early 20th Century Music (3)** A study of compositional techniques in representative vocal and instrumental works of the first two decades of the century.

**412 Composition III (3)** Composition in larger forms. Open to Composition majors only. PREREQ: MTC 313

**413 Composition IV (3)** Advanced composition involving major projects in a contemporary idiom. PREREQ: MTC 412.

**415 Serialism and Atonality (3)** Compositional procedures and theoretical concepts in atonal and serial works of Schoenberg, Berg, Webern, Bartok, Stravinsky, and more recent composers. PREREQ: MTC 213.

**416 Jazz Practices (2-3)** Jazz history, writing, and performance. Survey of basic jazz literature; fundamental techniques in arranging and improvising. PREREQ: MTC 213 or equivalent

**417 Electronic Music (3)** Materials and techniques of electronic music and their use in composition. Laboratory experience in the composition of electronic music. PREREQ: MTC 312 or approval of the instructor.

**450 Acoustics of Music (3)** The study of sound, its production, transmission, and reception. Musical instruments, the acoustics of rooms, and the physical basis of scales.

## COURSE DESCRIPTIONS
DEPARTMENT OF MUSIC HISTORY
Symbol: MHL

*Liselotte M. Schmidt, Chairperson, Cohen, Johns, Murray, Price and Staff.*

**121 Fine Arts (Music) (3)** Designed for the general requirements. An introductory course in the history and appreciation of music from the Middle Ages through the contemporary period. Not open to music majors or elementary education students with a concentration in music.

*Note that other courses are available to the non-music major for general requirements. Particularly suitable are MHL 122, 123, 124, 125, 126. Additional courses may also be taken for the same purpose, with consent of department chairperson.*

**122 Music in Western Civilization I (3)** The history and appreciation of music from the earliest times through the Baroque period. Musical forms, aesthetic concepts, and practices. Analysis and listening experience. Not open to music majors.

**123 Music in Western Civilization II (3)** The history and appreciation of music from the classical through the contemporary period. Continuation of MHL 122. Not open to music majors.

**124 Asian Music (3)** A study of the music of Asia and surrounding regions. Open to non-music majors only, without prerequisite.

**125 Perspectives in Jazz (3)** For non-music majors. Guided listening to improve understanding and enjoyment of jazz with emphasis upon jazz heritages, chronological development, and sociological considerations, culminating in an analysis of the eclectic styles of the 1960's and 70's. Not open to music majors.

**126 Folk and Traditional Music of the Western World (3)** Introductory survey of music and musical styles of folk and traditional music in the Western world. Analysis of styles, forms, aesthetic and cultural concepts, and practices, surveyed as they relate to folk music and the mainstream of art music. Not open to music majors.

**179 Special Subjects Seminar (3)** Significant topics in music history and literature presented by faculty members and/or visiting lecturers. Designed for the non-music major who has had little or no previous musical experience. Fulfills the general requirements. Not open to music majors.

**201 Form and Style in the Arts (3)** Relationships between the arts (music, literature, fine arts, and dance) stressed through common principles of form and style. Concentration on the development of skills of critical perception through practical application with reference to various arts. Fulfills the interdisciplinary requirement.

**221 Music History I (3)** A history of music from earliest known times through the Baroque Period — to 1750. Analysis of styles, forms, aesthetic concepts, and practices. PREREQ for music majors: MTC 113. For non-music majors: consent of instructor

**222 Music History II (3)** A history of music from the Classical through Contemporary Period. Analysis of styles, forms, aesthetic concepts, and practices. PREREQ for music majors: MTC 113. For non-music majors: consent of instructor

**310 Collegium Musicum (1)** A chamber ensemble specializing in the use of authentic instruments and performance techniques in the music of the Medieval, Renaissance, and Baroque eras. Open by audition

**320 Folk and Non-Western Music (3)** A study of the music of non-Western folk music, along with an introduction to ethnomusicology and its research techniques. PREREQ: MHL 221, 222.

**321 African and Afro-American Music (3)** African music in its social context. African-influenced music of the Western hemisphere including spirituals, work songs, field hollers, ragtime, blues, jazz, gospel songs, and soul music. Some "art" music by black composers. PREREQ: an introductory course in music or permission of instructor

**322 History of Jazz (3)** A survey of the history of jazz, including representative performers and their music. PREREQ: MHL 221 and 222, or permission of the instructor.

**440 Medieval Music (3)** Development of plainsong and secular monody and beginnings of early history of polyphony through the 14th century. Consideration of contemporary trends in the visual arts, history, and literature. PREREQ: MHL 221 and 222, or permission of instructor

**441 Renaissance Music (3)** Sacred and secular music in the age of Dufay; changing forms and styles through the music of Franco-Flemish groups; the frottola and related forms; Palestrina and his contemporaries, with a brief consideration of contemporary trends in the visual arts, history, and literature. PREREQ: MHL 221 and 222, or permission of instructor

**442 Baroque Music (3)** Styles and forms of Baroque repertoire; contributions of the major Baroque composers; role of music and musicians in the society of the period. PREREQ: MHL 221 and 222, or permission of instructor.

**443 Late 18th-Century Music (3)** Changing styles and forms in the sons of J.S. Bach; the Viennese pre-classicists; the Mannheim school, opera, Joseph and Michael Haydn, Mozart, and their contemporaries; the early works of Beethoven. PREREQ: MHL 221 and 222, or permission of instructor.

**444 Nineteenth Century Music (3)** Historical developments during the Romantic Period (circa 1800-1900). Analysis of changes and trends, comparative aspects of new forms. PREREQ: MHL 221 and 222, or permission of instructor

**445 Twentieth Century Music (3)** Trends in modern music from about 1900 to the present. Analysis and listening experience. PREREQ: MHL 221 and 222, or permission of instructor

**450 Aesthetics and Music Criticism (3)** The nature of aesthetic experience and various problems in the philosophy of art. Principles of criticism

related to music and its performance. For music majors, or non-music majors with permission of instructor

**451 Music in the United States (3)** Survey of the development of music and musical style from 1620 to the present. Analysis of styles, forms, aesthetic concepts, and practices. PREREQ: MHL 221 and 222, or permission of the instructor

**452 Performance Practices I (3)** Historical and analytical consideration of the special problems in stylistic realization and performance of music in the Middle Ages and Renaissance (ca. 900-1600). PREREQ: MHL 221 and 222, or permission of the instructor

**453 Performance Practices II (3)** Historical and analytical consideration of the special problems in stylistic realization and performance of music of the Baroque, Classic, and early Romantic eras (ca. 1600-1850). PREREQ: MHL 221 and 222, or permission of the instructor

**454 History of Opera (3)** A basic course in the origin and development of the opera and its dissemination throughout the Western World. PREREQ: MHL 221 and 222, or permission of instructor

**455 History of Orchestral Music (3)** A study of representative orchestral works; symphonies, concerti, suites, overtures, and others, from the Baroque Period to the present. PREREQ: MHL 221 and 222, or permission of instructor

**456 History of Musical Instruments (3)** The development of musical instruments from antiquity to the 20th century. A world view of instruments will include function and performance practice.

**457 History of Chamber Music (3)** Analysis of style and form of chamber music repertoire from the Baroque through Modern Period. PREREQ: MHL 221 and 222 or permission of instructor

**460 Bach and His Works (3)** The life of J.S. Bach; works for organ, keyboard and other instruments; cantatas and larger choral works. PREREQ: MHL 221 and 222 or permission of instructor

**461 Beethoven and His Works (3)** The life and times of Ludwig Van Beethoven, consideration of orchestral, chamber, and vocal music, emphasizing chronological stylistic development, consideration of Beethoven's influence on the later 19th century. PREREQ: MHL 221 and 222 or permission of instructor

**462 Mozart and His Works (3)** A study of the life and music of Wolfgang A. Mozart with special reference to the period in which he lived. PREREQ: MHL 221 and 222 or permission of instructor

**470 Research in Music History (3)** Basic bibliographical material, library resources, and research techniques, applicable to undergraduate study in music history and literature. Required of B.M. majors in music history. Open to others with permission of instructor and department chairperson

**479 Seminar in Music History I (1-3)** Significant topics presented by faculty members and/or visiting lecturers. Designed to meet specific needs of undergraduate music majors.

**480 Seminar in Music History II (1-3)** Significant topics presented by faculty members and/or visiting lecturers. Designed to meet specific needs of undergraduate music majors.

**481 Independent Study (1)**

**482 Independent Study (2)**

**483 Independent Study (3)**

## COURSE DESCRIPTIONS
### DEPARTMENT OF MUSIC EDUCATION
Symbol: MUE

*Richard C. Merrell*, Chairperson, *Belmain, Markey, Singleton, Wells and Staff.*

**231 Music for the Classroom Teacher (3)** Designed to equip the elementary classroom teacher to participate in the music program. Emphasis on teaching procedures and materials. PREREQ: passing grade on a music fundamentals test.

**232 Music in Early Childhood (3)** Designed to equip the teacher of early childhood to develop specific concepts utilizing singing, rhythmic, and melodic activities. Emphasis on listening and movement to music.

**233 Handbells (1)** Selection of music; care of bells, maintenance of library; programming, styles; history of bells; bell assignments; performance practice; performance.

**331 The Music Curriculum, K-6; Methods and Materials (3)** The study of music and the learning process at the elementary level; the listening program, pedagogy for the elementary music program, and materials. See note below

**332 The Music Curriculum, 7-12; Methods and Materials (3)** The study of music and the learning process at the secondary level, the listening program, the middle and junior high school general music programs, ethnomusic, programs and performances, basics of administration, related arts, the music major program, and evaluative techniques. See note below

**333 Instrumental Methods (3)** Fundamentals underlying the development of instrumental programs in the public schools. Emphasis upon program organization and administration, teaching procedures, and materials.

*Note that MUE 331 must be successfully completed before MUE 332. The sequence for these REQUIRED music education courses is consecutive semesters: MUE 331 followed by MUE 332 and then MUE 431/432 the following semester. Enrollment for these courses is limited on a yearly basis and is planned at a meeting the spring semester for sophomores. SEE DEPARTMENT CHAIRPERSON. MUE 333 is scheduled during the semester with MUE 332.*

**335 Choral Materials and Practices (2)** Designed to acquaint the student with the vast amount of choral music suitable for school use. Program building and rehearsal techniques are demonstrated.

**337 Instrumental Techniques and Materials (2)** For juniors and seniors who desire to specialize in instrumental music. Considers rehearsal procedures, effective materials, minor repairs of instruments, competitions and festivals, and marching band procedures. PREREQ: MUE 333.

**412 Teaching Music Listening at the Elementary Level (3)** The teaching of the elements of music, musical concepts, and the development of aesthetic sensitivity through listening.

**422 Music in the Middle School (3)** Review and critical analysis of music education in the middle school: philosophies; curriculum; practices; personnel.

**423 Elementary Orff Techniques (3)** Basic Orff melodic and rhythmic techniques for the elementary classroom. Emphasis on developing concepts for individual teaching situations. PREREQ: MUE 331, 332.

**425 Elementary Kodaly Techniques (3)** Basic Kodaly techniques. Adaptation of teaching procedures for elementary school: rhythm; melody; movement, improvisation.

**428 Music in Special Education (3)** Characteristics of special pupils; adaptation of teaching techniques, materials, curriculum. PREREQ: MUE 231, 232, or 331.

**430 Related Arts Pedagogy in Music Education (3)** Principles of related-arts teaching related to musical elements, art, and creative movement, with appropriate teaching techniques at specified grade levels. Materials for school music programs; basal music series, other texts and literature, resources in related arts. Demonstration lessons and unit planning.

**431 Student Teaching (Elementary) (6)** Observation and participation in teaching vocal and instrumental music at the elementary level. Undertaken in conjunction with qualified cooperative teachers. Professional conferences and visitations are an integral part of the experience. PREREQ: See 432

**432 Student Teaching (Secondary) (6)** Observation and teaching general, vocal, and/or instrumental music at the secondary level. Professional conferences and visitations are an integral part of the experience. PREREQ for 431/432: Satisfy requirements under "Admission to Teacher Education." GPA 2.50. Grades of C or better in Keyboard Minor, Voice Minor, and required methods classes. Complete Music Theory and Aurals, Music History, Conducting, and all instrument classes. 96 semester hours including the required Music Theory, Aural Activities, Music History, Conducting, and all professional education courses

---

## COURSE DESCRIPTIONS
### DEPARTMENT OF KEYBOARD MUSIC

*Praxiteles Pandel*, Chairperson; *Aliferis, Bedford, Fields, Lee, Lucas, Pennington, Schick, Sprenkle, Veleta, Voois, Whitten, Wilkinson and Staff.*

NUMBERING SYSTEM

Private and class lessons given by the Department of Keyboard Music are shown by the following numbers, together with the appropriate prefix:

HAR — Harpsichord
PIA — Piano
ORG — Organ

**191-192 Class instruction in minor performance area (1)**

**101-402 Private instruction in minor performance area (1)**

**105-106 Private instruction in minor performance area, Elementary Education students with a concentration in music (1)**

**107-109 Private instruction in a major performance area, Elementary Education students with a concentration in music (1)**

**111-412 Private instruction in major performance area, Music Education program (2)**

**413 Elective credit for senior recital, accompanying, or other participation in concerts or**

recitals, or extra study of literature. Available to music education seniors only during the non-student-teaching semester by permission of the department (1)
141-442 Private instruction in advanced performance area, B.Mus. Program (3)

KEN 111 Keyboard Ensemble (1/2) Principles of ensemble playing through the performance of various types of chamber music.
MAK 311-314 Master Class (Keyboard) (1) For keyboard majors. Experience in performing memorized literature. Class members also play two-piano compositions and ensemble music for piano and other instruments. Keyboard trios, quartets, and quintets are analyzed and performed.
ORG 351 Organ Literature I (3) A survey of literature for the organ from the 13th century to the Baroque period, influence of the organ on the literature
ORG 352 Organ Literature II (3) A survey of literature for the organ from J. S. Bach to the present, influence of the organ on the literature. Recordings and performances by organ majors will be evaluated.
ORG 451 Accompanying (3) Performance of the vocal and instrumental accompanying literature for organ from all periods; performance and reading sessions
ORG 452 Service Playing (3) A study of problems in service playing for the organist. Included will be hymn accompaniment, improvisation, conducting from the organ and literature for the service.
PIA 213 Studio Lessons in Accompanying (1) Studio instruction in accompanying for pianists in any music program. An elective course which may be repeated
PIA 250 Accompanying, Ensemble, and Sight Reading (1) Class instruction in accompanying, ensembles, and sight reading. This class may be repeated
PIA 325 Piano Technique (3) An exploration of the many approaches to acquiring and teaching piano technique; the correlation between technique and musical style; how to practice and to analyze physiological movements.
PIA 403 Harpsichord and Continuo Realization (1) An introduction to harpsichord playing and the principles of continuo accompaniment as a Baroque style.
PIA 404 Transposition and Score Reading (2) Emphasizing the needs of the keyboard accompanist, techniques include clef reading, harmonic analysis, interval transposition, solfege steps, and enharmonic changes
PIA 405 Accompanying — Vocal (3) Performance of the vocal accompanying literature from all periods; performance and reading sessions in class.
PIA 406 Accompanying — Instrumental (3) Performance of the instrumental accompanying literature from all periods; emphasis on the sonata literature; performance and reading sessions in class
PIA 410 Independent Studies in Keyboard Music (1-3) Special research projects, reports, or readings in keyboard music. PREREQ. Permission of department chairperson
PIA 425 Keyboard Literature I (3) A survey of literature for keyboard instruments from the Baroque Period through the late Classical Period. The various styles in solo and ensemble literature are illustrated by recordings and performance by keyboard majors.
PIA 426 Keyboard Literature II (3) A continuation of PIA 425. Performance by keyboard majors and recordings. Literature from the Romantic through the Impressionist Period is studied
PIA 427 The Concerto (3) A chronological presentation of the development of the piano concerto emphasizing performance practices and problems. PREREQ. Theory IV.
PIA 428 The Music of Chopin (3) A study of the piano music of Chopin.
PIA 429 Special Subjects Seminar (1-3) Significant topics presented by faculty members and/or visiting lecturers. Designed to meet the specific needs of undergraduate keyboard majors.
PIA 450 Group Piano Pedagogy I (4) Procedures and materials for group piano instruction from pre-school through beginning levels. Emphasis upon developing musical literacy and creativity through peer learning and group interactions. Includes practicum in group piano instruction
PIA 451 Group Piano Pedagogy II (4) Procedures and materials for group instruction from the intermediate through advanced levels. Emphasis upon developing comprehensive musicianship through an interwoven study of literature, musical analysis, technique, improvisation, ear training, harmony, transposition and sight reading. Includes practicum in group piano instruction. PREREQ: PIA 450.
PIA 452 Piano Pedagogy I (4) An in-depth study of repertoire and materials available to the studio piano teacher for the beginning and intermediate levels. Discussions of related concerns such as memorization, practice techniques, developing technique through literature, principles of fingering, and sight reading. Includes practicum in individual instruction.
PIA 453 Selected Topics in Piano Pedagogy (4) Further exploration of the goals and objectives of piano study through presentation of selected topics and continued practicum in individual instruction.
PIA 454 Piano Tuning and Repair (3) An introduction to the basic techniques of piano tuning and repair. Emphasis on tuning unisons, equal temperament and repairing the piano action and its parts. The construction of the piano and its historical developments. PREREQ: Music major status or permission of the instructor.
PIA 455 Internship for Piano Tuning and Repair (3) Supervised work experience on Swope Hall practice room pianos. Weekly assignments of actual tuning and repair with emphasis on analysis and resolution of problems. Reports will be made to the instructor in writing. PREREQ. PIA 454

---

## DEPARTMENT OF VOCAL AND CHORAL MUSIC

*Roy D. Sweet,* Chairperson; *Alt, Baird, Dorminy, Frenz, Friday, Vandever, Wagner, Williams, and Staff.*

### NUMBERING SYSTEM

Private lessons given by the Department of Vocal and Choral Music are shown by the following numbers, together with this prefix:

VOI-Voice

101-402 Private instruction in minor performance area (1)
111-412 Private instruction in major performance area, Music Education program (2)
413 Elective credit for senior recital, accompanying, or other participation in concerts or recitals, or extra study of literature. Available to music education seniors only during the non-student-teaching semester by permission of the department. (1)
141-442 Private instruction in advanced performance area, B.Mus. program (3)
151-452 Private instruction in minor performance area, B.A. Theatre (1)
161-462 Private instruction in major performance area, B.A. Theatre (2)

CHO 112 Freshman Chorus (1) A freshman chorus presenting a wide selection of choral music for mixed chorus. Music of the high school level as well as more advanced literature is presented. Open to students in other curricula through audition.
CHO 211 Men's Chorus (1) A sophomore chorus presenting the choral literature for male voices. Open to men in other curricula.
CHO 212 Women's Chorus (1) A sophomore chorus presenting the choral literature for female voices.
CHO 311 Masterworks Chorus (1) A junior-senior chorus presenting oratorios, masses, and the more difficult mixed chorus literature. Open to students in other curricula through audition.
CHO 410 Opera Chorus (1) An elective course devoted to the training of a choral group which participates in opera or operetta productions. May not be used to satisfy choral credits. Membership by audition.
CHO 411 Chamber Choir (1) Small group of singers specializing in the performance of Renaissance/Baroque, sacred, and secular literature. Members chosen by audition.
CHO 412 Concert Choir (1) Devoted to acquiring a fine technique in choral singing through the preparation of programs for performance. Membership by audition.
VOC 111 Madrigal Class (1) A survey of madrigal literature through records, tapes, and class performance with emphasis on materials suitable for use in secondary schools. PREREQ: MHL 221 or permission of the instructor. Fall semester of odd numbered years.
VOC 112 Performance Preparation I (3) A course designed to teach the student performer how to prepare a dramatic vocal score. PREREQ. MTC 110 or equivalent.
VOC 113 Performance Preparation II (3) A continuation of Performance Preparation I with emphasis on advanced literature and interrelative techniques. PREREQ: VOC 112.
VOC 227 Literature of the Musical Theater (3) The literature of the musical theatre from Singspiel to Broadway Musical. Changes in style are observed and analyzed.
VOC 311 Choral Conducting I (2) A practical application of conducting and vocal techniques in choral direction through practice in conducting a choral group. Fall semester
VOC 312 Choral Conducting II (2) Continued

development of the conducting techniques with stress on conducting of polyphonic choral music and on the musical styles of the various choral periods. PREREQ: VOC 311. Spring semester.
**VOC 329 Art Song (3)** Origins and development of the art song.
**VOC 410 Independent Studies in Vocal or Choral Music (1-3)** Special research projects, reports, or readings in vocal and/or choral music. PREREQ: Permission of department chairperson.
**VOC 411 Master Class (Voice): Baroque Period (1)**
**VOC 412 Master Class (Voice): German Lied (1)**
**VOC 413 Master Class (Voice): French Melodie (1)**
**VOC 414 Master Class (Voice): 20th Century Art Song (1)**
**VOC 415 English-Italian Diction (3)** English, Italian, and Latin diction for singers. Use of phonetics with application to singing of selected songs.
**VOC 416 French-German Diction (3)** French and German diction for singers. Use of phonetics with application to singing of selected songs.
**VOC 421 Opera Workshop (2)** A study of the arts and crafts required in a musical production; coaching, set designing and construction, stage movement, and costuming.
**VOC 424 Musico-Dramatic Production (3)** Major roles and/or major responsibilities in extended productions. By audition.
**VOC 426 Choral Literature (3)** The development and performance style of the choral repertoire.
**VOC 429 Special Subjects Seminar (1-3)** Significant topics presented by faculty members and/or visiting lecturers. Designed to meet the specific needs of undergraduate music majors.
**VOC 436 Vocal-Choral Music Workshop (1-3)** Specialized workshops in the area of vocal and/or choral music. Subject to be announced at the time of the offering.
**VOI 100 Voice for the Non-music Major (1)** Private voice instruction for cultural enrichment. May be repeated
**VOI 191 Voice Class (1)** Class instruction in a minor performance area. Fall semester. Open to non-music majors with permission of the department chairperson.
**VOI 192 Voice Class (1)** Continuation of VOI 191 PREREQ. VOI 191. Spring semester

## DEPARTMENT OF INSTRUMENTAL MUSIC

*Edward A. Barrow*, Chairperson; *Ahramjian, Boerlin, Goebel, Guidetti, Hegvik, Klein, Laudermilch, Lyons, Richter, Southall, Swartley, Villella, and Staff.*

NUMBERING SYSTEM

Private and class lessons given by Department of Instrumental Music are shown by the following numbers, together with the appropriate prefix:

BAR — Baritone
BAS — Bass
BSN — Bassoon
CLT — Clarinet
FLU — Flute
FRH — French horn
GTR — Guitar
HRP — Harp
OBO — Oboe
PER — Percussion
SAX — Saxophone
TBA — Tuba
TPT — Trumpet
TRB — Trombone
VCL — Cello
VLA — Viola
VLN — Violin

**191-192 Class instruction for Music Education majors in the playing and teaching of the above instruments (Except ACS 191-192: 1 credit each) (½)**
**101-402 Private instruction in minor performance area (1)**
**111-412 Private instruction in major performance area (2)**
**141-442 Private instruction in advanced performance area, B.Mus. Program (3)**

**AIM 311 Marching Band Techniques (1)** A survey of the function of the total marching band and of each component within it.
**AIM 361 Jazz Musicianship and Improvisation I (3)** A basic course in jazz improvisation which emphasizes the learning and discovery of improvisational techniques through playing and listening.
**AIM 362 Jazz Musicianship and Improvization II (3)** A continuation of AIM 361
**AIM 365 Jazz Ensemble Techniques (1)** Techniques and methods for organizing, rehearsing, programming and operating jazz ensembles.
**AIM 429 Special Subjects Seminar — Instrumental (1-2-3)** Topics in the area of instrumental music presented by faculty members and/or visiting specialists.
**ALC A Literature Class** An historical survey of the music written for instrumental solo and ensemble including current teaching materials.
**ALC 311 Brass Literature (3)**
**ALC 331 String Literature (3)**
**ALC 341 Woodwind Literature (3)**
**AMC A Master Class** Solo and ensemble instrumental repertoire is performed and critiqued by the teacher and students.
**AMC 311-314 Master Class Brass (1)**
**AMC 321-324 Master Class Percussion (1)**
**AMC 331-334 Master Class Strings (1)**
**AMC 341-344 Master Class Woodwinds (1)**
**ACB A Class in Brass at the beginning level.**
**ACB 191 Trumpet Class (½)**
**ACB 192 French Horn Class (½)**
**ACB 193 Trombone Class (½)**
**ACB 194 Brass Class (½)**
**ACP A Class in Percussion at the beginning level.**
**ACP 191 Percussion Class (Drums) (½)**
**ACP 192 Percussion Class (Mallets) (½)**
**ACP 193 Drum Set Class (½)**
**ACS A Class in Strings at the beginning level.**
**ACS 191 Violin Class I (1)**
**ACS 192 Violin Class II (1)**
**ACS 193 Viola Class (½)**
**ACS 194 Cello Class (½)**
**ACS 195 Bass Class (½)**
**ACS 196 Guitar Class (½)**
**ACW A Class in Woodwinds at the beginning level.**
**ACW 191 Clarinet Class (½)**
**ACW 192 Flute Class (½)**
**ACW 193 Double Reed Class (½)**
**ACW 194 Woodwind Class (½)**
**AEB An Ensemble: Band**
**AEB 101 Elementary Band (½)**
**AEB 111 Marching Band (1)**
**AEB 121 Concert Band (1)**
**AEB 131 Symphonic Band (1)**
**AEB 141 Wind Ensemble (1)**
**AEO An Ensemble: Orchestra**
**AEO 101 Elementary Orchestra (½)**
**AEO 111 Chamber Orchestra (½)**
**AEO 121 Studio/Pit Orchestra (½)**
**AEO 131 Chamber Orchestra (1)**
**AEO 141 Symphony Orchestra (1)**
**AES An Ensemble: Small**
**AES 111 Brass Ensemble (½)**
**AES 121 Percussion Ensemble (½)**
**AES 131 String Ensemble (½)**
**AES 141 Woodwind Ensemble (½)**
**AES 151 Jazz Ensemble (Criterions) (½)**
**AES 152 Jazz Ensemble (Combo) (½)**
**AIC A Class in Instrumental Conducting**
**AIC 311 Instrumental Conducting I (2)**
**AIC 312 Instrumental Conducting II (2)**
PREREQ. VOC 311 or AIC 311

# Nursing

Susan Slaninka, *Chairperson*
**ASSOCIATE PROFESSORS:** Slaninka
**ASSISTANT PROFESSORS:** Brown, Coghlan-Stowe, Devlin-Kelly, Fickner, Harrison, Matz, Nester, Sell
**INSTRUCTORS:** Conroy, Garrett, Taylor

The Department of Nursing is accredited by the National League for Nursing and approved by the State Board of Nurse Examiners, Commonwealth of Pennsylvania.

### Admission Criteria

Applicants for nursing must have completed work equal to a standard high school course including a minimum of 16 units: four units of English, three units of social studies, two units of mathematics (one of which must be algebra) and two units of science with a related laboratory or the equivalent. A combined score of 1000 is expected on the SAT examination.

## BACHELOR OF SCIENCE IN NURSING

The Bachelor of Science degree program in nursing is offered by the Department of Nursing, which is an integral part of the School of Health Sciences. The family-centered program is based upon the concept that man is a biopsychosocial being with basic health needs. The Department of Nursing believes that quality health care is a basic right of all people and that man's health care needs can be met through the practice of the professional nurse who has completed a systematic program of courses in the social and natural sciences, humanities, and the nursing major.

Characteristics of the graduate include: 1) an awareness and sense of responsibility for contemporary social issues; 2) concern for improvement of health care within society through professional citizen activities at various adaptational levels and developmental stages in a variety of settings; 3) competency in utilizing the nursing process to assist clients; 4) collaboration, coordination and consultation as a colleague within the interdisciplinary health team; 5) belief in learning as a life-long process; 6) participation in the change process by collection of data applying to nursing theories and practice.

### SPECIAL REQUIREMENTS

Generic nursing candidates are admitted once a year, in September. Transfer students can be admitted in September or January. Nursing students are required to supply their own transportation to clinical facilities.

**Insurance.** Students are required to carry liability insurance during the junior and senior year at a yearly cost of approximately $20. Students are also required to carry health insurance.

**Uniforms.** Students must purchase uniforms costing approximately $150 at the end of their sophomore year.

**CPR Certification.** Students enrolled in nursing courses with a clinical component are required to be currently certified by the American Red Cross, American Heart Association, or other acceptable resource in Life Support (2-person) Cardio-Pulmonary Resuscitation.

### HEALTH REQUIREMENTS

Nursing candidates must meet the general health requirements of all students at West Chester University for the freshmen and sophomore years. Candidates must meet the following health requirements during the summer prior to the junior and senior years; inoculations against diphtheria, typhoid, tetanus, measles, and poliomyelitis (a series of four); a complete physical examination which must include a chest x-ray, a complete blood count, blood serology, TB skin test, urinalysis, dental and eye examinations, and any other diagnostic tests deemed necessary.

### Nursing Laboratory

The nursing laboratory in Room B18-19 Schmucker Science Center is available as a resource to help the nursing student in the learning process. There are two sections of the laboratory. One area houses a variety of equipment to allow the student to view A-V material such as filmstrips, slides and videocassettes related to psychomotor skills involved in nursing. This equipment can be used individually or in small groups. The other section contains equipment to allow the student to practice these skills.

Every student is required to utilize the learning laboratory at specified times. In addition, it is anticipated that students will spend time utilizing this resource for independent learning based on their individual needs. The laboratory is staffed by a full-time nursing laboratory coordinator who is a registered nurse. The hours when the lab is open will be posted.

### ACADEMIC PROMOTION POLICY

**Incompletes, Failures, and D Grades**

All nursing students who have a grade of incomplete, D or F in required courses during the freshman and sophomore level must repeat these courses and achieve a satisfactory grade (C− or above) before entering the junior level nursing major courses.

A student must achieve a grade of C− or better in the nursing major in the junior year for promotion to the senior year and achieve at least a C− in the senior year for graduation.

If a student must repeat a nursing course, a grade of C− or better in both the theory and laboratory (clinical practicum) components of the course must be achieved. The theory and clinical portions of a nursing course must be taken concurrently. Not achieving at least a C− in such cases is considered grounds for dismissal from the nursing major.

Other policies are explained in detail in the current issue of the departmental Student Handbook.

### CORE REQUIREMENTS*

PSY 100, 210, ENG 120, ENG 121, SOC 200, BIO 100, CHE 103-104, CRL 103-104, BIO 209-309, 214, CHE 230, PSY 375, BIO 307, CHE 404, SOC 240, and MAT 121.

*Some of these courses may be used to satisfy distributive requirements required by the University.

### NURSING CONCENTRATION REQUIREMENTS

NSG 212, 311-312, NSL 311-312, NSG 411-412, NSL 411-412. A total of 128 credits are required for graduation

TRANSFER POLICY — Transfer students are accepted into the nursing major. The department also offers a program for registered nurses who wish to earn a baccalaureate degree in nursing. Detailed information about these programs may be obtained from the Office of Admissions or the department office.

COURSE DESCRIPTIONS
NURSING
Symbol: NSG

**109 Health Issues of Women (3)** (Offered conjointly with Department of Health, as NSG/HEA 109). This course encompasses the needs and concerns of women as consumers in our present health care system. It examines various biological, psychological, and social topics related to women's health care, including medical abuses, sexuality, sex roles, and women's health in the workplace. This course is an enrichment to liberal education, encouraging inquiry into previously neglected areas of women and health. It is offered in the Women's Studies Program, and is open to all university students, regardless of major, as a free elective.

**110 Transcultural Health: Principles and Practices (3)** (Offered conjointly with Department of Health, as NSG/HEA 110). This course examines the health beliefs and practices of a variety of subcultural groups in the U.S. Emphasis is placed on the application of multi-cultural health beliefs to the caring process. It utilizes the cross cultural approach in meeting the health needs of clients and families. It is open to all university students, regardless of major, as a free elective.

**212 Nursing Theories and Concepts (3)** Sophomore year. Nursing theories and concepts, conceptual frameworks, theories from other disciplines which may apply to nursing, and the nursing process are studied in this course. PREREQ: Sophomore standing.

**214 Proseminar: Nursing Theories and Concepts (3)** In this course the student examines various nursing theories and concepts; conceptual frameworks, theories from other disciplines which apply to nursing, nursing history; nursing education; professionalism in nursing, the nursing process, ethical, legal, and political aspects of nursing; and current issues in nursing. This course is a prerequisite for upper division nursing courses and serves as a transition to subsequent nursing courses. There is no clinical practicum associated with NSG 214. PREREQ: R.N. licensure.

**216 Adaptations in the Aged (3)** In this course the student will have the opportunity to form a relationship with a healthy, elderly individual. Students will utilize communiction skills through interaction on a one-to-one basis with senior citizens in a private home setting. Students will become acquainted with the problems of day-to-day living and the crises that face this population along with the adaptive strengths and resources that are an essential part of the healthy older person's personality.

**311 Adaptation I (5)** Junior year, fall semester. The emphasis of this course is the prevention of illness and promotion of health by assessment of the health status, appropriate intervention, and evaluation of the health promotion plan. The nursing process provides the framework for promotion of wellness in a variety of settings with clients of any age group.

**NSL 311 Adaptation I Laboratory (5)** Clinical experiences are provided in agencies where relatively well populations have been identified, such as schools, nursery schools, well baby clinics, health maintenance clinics. NSG 311 and NSL 311 always must be taken concurrently. PREREQ: NSG 212, ENG 120, ENG 121, CHE 103, CHE 104, CRL 103, CRL 104, CHE 230, 404, BIO 100, 209-309, 214, PSY 100, 210, SOC 200, 240.

**312 Adaptation II (5)** Junior year, spring semester. The emphasis of this course is on the maintenance of health and promotion of adaptive responses in clients with chronic health problems. The nursing process is used to assist these clients to adapt to stressors through supportive therapeutic, palliative, and preventive measures.

**NSL 312 Adaptation II Laboratory (5)** Clinical experience is provided in settings where clients with chronic health problems have been identified. These settings include rehabilitation centers, a child development center, nursing homes, and acute care settings. These environments provide flexibility for students to implement changes for clients and acquire skills which will be utilized in other nursing courses. NSG 312 and NSL 312 always must be taken concurrently. PREREQ: NSG 311, NSL 311, BIO 307.

**314 Internship (3)** This course is designed to provide nursing students with the opportunity to enhance knowledge and skills acquired in NSG/NSL 311-312. Students will have the opportunity to participate in the care of a group of clients over a consecutive span of days and to increase their awareness of the professional role. PREREQ: Successful completion of NSG/NSL 311-312.

**316 Coping with Cancer (3)** The emphasis of this course is on coping with clients who have cancer. Various physiological and psychosocial effects this disease has on clients and their families will be examined. The course will allow students to explore their own feelings related to cancer and assist them in their contacts with cancer clients. Topics that will be discussed include dealing with loss, pain, pain management, hospice care, and communiction with the cancer client. This course is open to all students.

**410 Independent Study in Nursing (2)** The student produces an independent research-oriented project under close faculty advisement, on a nursing topic of special interest to the student. Participation in a selected field experience is optional. PREREQ: Permission of department chairperson.

**411 Advanced Adaptational Problems I (5)** Senior year, fall semester. The emphasis of this course is on the study of adaptive responses that create new stresses which require additional adaptations and frequently interrupt an individual's mode of functioning. The nursing process is used to assist clients in crises.

**NSL 411 Advanced Adaptational Problems I Laboratory (5)** Clinical experience is provided in acute care settings, in psychiatric inpatient settings, and in community health settings. NSG 411 and NSL 411 always must be taken concurrently. PREREQ: NSG 312, NSL 312, PSY 375.

**412 Advanced Adaptational Problems II (6)** Senior year, spring semester. NSG 412 is a continuation of NSG 411 with the emphasis on the subconcepts of decision making and advocacy. The nursing process is utilized interdependently in approaching multi-health care problems of clients. Special attention is given to inquiry as the student correlates nursing theories and concepts with identifiable research problems in varied environments. Opportunity is provided in this semester to develop organization and management skills.

**NSL 412 Advanced Adaptational Problems II Laboratory (5)** Clinical experience is provided in acute care settings, in psychiatric inpatient settings, and in community health settings. NSG 412 and NSL 412 always must be taken concurrently. PREREQ: NSG 411, NSL 411, MAT 121

# Peace and Conflict Studies

David S. Eldredge, *Director*

Peace and conflict studies examine social conflict, conflict resolution and cooperation at the group, national, and international levels. This process involves understanding factors which contribute to peace with justice, various functions of conflict, and processes by which conflict may be managed. The minor fosters skills for both study and action. Though primarily an enrichment to liberal education, this minor has some relevance to a variety of careers including intergroup relations, criminal justice, social work, and international relations.

The peace and conflict studies minor consists of 18 credit hours some of which may also be used to fulfill other degree requirements. It may be used as a concentration for the Associate of Arts in liberal studies degree.

These courses include:

1. Introduction to Conflict Resolution (3): SSC 275
2. Experiential Learning (3): SPC 216 or SPC 403
3. Global Perspectives (3): PSC 315 or PSC 316 or SOC 376
4. Themes and Special Approaches (3): SOC 371 or SOC 335 or SPC 409 or SCC 370 or PSY 455
5. Electives. Two additional courses from approved list.

Information about the minor may be obtained from Mr. Eldredge, Department of Government and Planning.

COURSE DESCRIPTIONS

**SSC 275 Introduction to Conflict Resolution (3)** (Anthropology/Sociology listing) Provides a cross-disciplinary approach to the area of conflict resolution Includes theoretical and applied aspects of both conflict resolution and peace studies Emphasis on both individual and collective resolution of conflicts. University faculty from anthropology, history, philosophy, political science, psychology, and sociology may participate throughout the semester

# Philosophy

George S. Claghorn, *Chairperson*

**PROFESSORS:** Claghorn, Croddy, Hipple, Platt, Riukas, Streveler, Struckmeyer

**ASSOCIATE PROFESSORS:** Banyacski, Williams

The Department of Philosophy offers two programs leading to the Bachelor of Arts degree and, in cooperation with the faculty of teacher education, a program leading to the Bachelor of Science in Education.

1. The B.A. in PHILOSOPHY surveys the history of philosophy, explores its major disciplines, and focuses on selected topics of perennial interest. The purpose of the program is to develop the organizational, analytic, and expressive skills required for law school, seminary, graduate work in philosophy, and the wide range of careers in government, business, and industry.
2. The B.A. in PHILOSOPHY — RELIGIOUS STUDIES is designed for students planning on religious vocations, or as a foundation for graduate work in religion or cross-cultural studies. The emphasis is on individual and social expression of religion, Western and non-Western, philosophic implications, and fine arts applications.
3. The B.S. in EDUCATION in SOCIAL STUDIES is for students interested in pursuing a concentration in philosophy while earning state certification to teach secondary school social studies.

Majors in the two B.A. programs should consult the department handbook and their advisor for current requirements.

Students planning to pursue the B.S. in Education in Social Studies should consult during the freshman year with both their advisor in this department and their professional studies advisor in secondary education.

## REQUIREMENTS COMMON TO THE B.A. PROGRAMS

| | |
|---|---|
| 1 General Requirements, see pages 30-32 | 44-51 s.h. |
| 2. Foreign Language/Culture Requirement | 0-15 s.h. |
| 3. Major Requirements | 24 s.h. |
| 4 Free Electives | 38-60 s.h |

## BACHELOR OF ARTS — PHILOSOPHY

| | |
|---|---|
| 1. Required Core Courses (PHI 180, 190, 270, 272, 499) | 15 s.h. |
| 2. Philosophy Electives | 9 s.h. |

## BACHELOR OF ARTS — PHILOSOPHY — RELIGIOUS STUDIES

| | |
|---|---|
| 1. Required Courses (PHI 102, 202, 203, 204, 271, 349, and SOC 344) | 21 s.h. |
| 2. Elective in Religious Studies, as advised | 3 s.h. |

## BACHELOR OF SCIENCE IN EDUCATION — SOCIAL STUDIES: CONCENTRATION IN PHILOSOPHY

Students interested in teaching secondary school may pursue a concentration in philosophy while earning state certification and the Bachelor of Science in Education. See description under SOCIAL STUDIES: B.S. IN EDUCATION, page 113.

## MINOR PROGRAMS

Students may minor in either of the two following programs. A minimum of 18 semester hours is required Elective courses are selected in consultation with the student's minor advisor. Either of these minors may be taken as a concentration by students in the Associate in Arts in Liberal Studies Program.

### Philosophy Minor

| | |
|---|---|
| 1. Required Courses (PHI 101, 150 or 190, 174 or 180, and 270, 271, or 272) | 12 s.h. |
| 2. Philosophy Electives, under advisement | 6 s.h. |

### Religious Studies Minor

| | |
|---|---|
| 1. Required Courses (PHI 102, 202 or 203, 204 or 205, 349) | 12 s.h. |
| 2. Religious Studies Electives, under advisement | 6 s.h |

## COURSE DESCRIPTIONS

PHILOSOPHY
Symbol: PHI

Note: Only PHI 412, 436, and 499 have prerequisites. All other philosophy courses are nonsequential and open to all students. Not all courses will be offered every year.

### INTRODUCTORY COURSES IN PHILOSOPHY AND RELIGION

★**101 Introduction to Philosophy (3)** The chief problems and methods of philosophic thought, with a survey of some typical solutions. The place and influence of philosophy in the life of man today. Offered every semester.

**102 Introduction to Religious Studies (3)** The role of religion in human life. Illustrations drawn from various traditions, rituals, and belief patterns, both ancient and modern

**150 Critical Thinking and Problem Solving (3)** Introduction to the principles of valid inference and effective thinking. Problem solving; puzzles; games; decision-making; the syllogism; probability; logical fallacies; creative thinking.

**174 Principles of the Arts (3)** Contrasting systems for the analysis and evaluation for works of art — literature, the visual arts, and music.

★**180 Introduction to Ethics (3)** Great ethical systems of history and their application to personal and social life. The right and the good, the nature of values; and critical ethical dilemmas.

**185 Introduction to Biomedical Ethics (3)** A survey of basic ethical theories, with application to contemporary issues. Rights and responsibilities; the definition of life; and biomedical research.

### COURSES IN THE HISTORY OF PHILOSOPHY

**270 History of Ancient Philosophy (3)** A survey of the major figures of ancient philosophy, from the pre-Socratics through Plato, Aristotle, the Epicureans, and Stoics, to the Skeptics and Neo-Platonists. Offered in fall.

**271 History of Medieval Philosophy (3)** The history of philosophy from the early Church fathers to the late Middle Ages. St. Augustine, St. Thomas, mysticism, Jewish and Mohammedan influences, humanism, and the rise of science.

**272 History of Modern Philosophy (3)** From Descartes to Hegel. The social, political, and scientific impact of the philosophers. Offered in spring.

★Approved distributive requirements course

**273 19th Century Philosophy (3)** Hegel and German Idealism; decisive influences on European and American literature and thought. Survey of the chief themes of Schopenhauer, Comte, Mill, Spencer, Marx, Kierkegaard, Darwin, and Nietzsche.

**274 Contemporary Analytic Philosophy (3)** Philosophic trends since 1850, including the process philosophy, Pragmatism, Positivism, Existentialism, and the Analytic School.

**284 American Philosophy (3)** Leaders in science, literature, religion, and government who have shaped American thought. Philosophers of Puritanism, the Revolution, Transcendentalism, and native schools of Realism, Idealism, and Pragmatism

**415 Existentialism (3)** The rise and development of Existentialism. Chief exponents; views of man, influence on ethics, literature, and social action

### COURSES ON OTHER PHILOSOPHICAL TOPICS

**190 Logic (3)** Introduction to symbolic logic. The nature of logical arguments; truth-functional propositions; validity; natural deduction; simple quantification. Offered every semester

**201 Contemporary Issues (3)** Discussion and analysis of contemporary philosophical issues of particular concern to students, such as death, personal identity, environmental ethics, and human labor. The topic varies from semester to semester.

**330 (also LIN 330) Introduction to Meaning (3)** Relationship between linguistics and philosophy, with emphasis on meaning in language. Some issues in the theory of meaning from both linguistics and philosophy; materials from each field to help solve these issues.

**360 (also LIN 360) Philosophy of Language (3)** Questions of meaning in communication. Emphasis on contemporary discussions of theories of natural language.

**382 Social Philosophy (3)** The relation between man and the state, especially as seen by recent thinkers. Justice, natural rights, political obligation, freedom, and equality.

**412 Ethical Theories (3)** Advanced course in ethical theory, stressing applications. PREREQ: PHI 180 or permission of the instructor

**413 Aesthetic Theories (3)** Interpretation of beauty and art. Effects of motivation, problems in media and in goals. A background of meaning for the evaluation of specific works of painting, sculpture, music and architecture.

**414 Philosophy of Religion (3)** Religion and the religious experience as viewed by major Western thinkers. The existence of God, immortality, religious knowledge, evil, miracles, and science and religion

**422 Philosophy of Science (3)** The nature of scientific method and scientific theory, with reference to presuppositions, inference, explanation, prediction, applications, and verification

**436 Symbolic Logic (3)** Principles and methods of symbolic logic. Practice in determining validity of sentential and quantificational arguments. The algebra of classes. PREREQ: PHI 190 or permission of the instructor

**483 Philosophy of History (3)** Classic philosophies of history, including those of Augustine, Vico, Hegel, Marx, Spengler, Toynbee and Collingwood. Definitions of civilization, norms of progress and decadence, determinism and indeterminism, causality, and pattern.

### COURSES IN RELIGION

**202 Religions of the West I (3)** A survey of the thought of Christianity and Judaism to the year 500.

**203 Religions of the West II (3)** A survey of the thought of Christianity, Islam, and Judaism, from the year 500 to the present. Emphasis on theological development, with attention to social, economic, and historical factors.

**204 Philosophies and Religions of India (3)** The religious and philosophical heritage of India, from Vedic times to the present. Examination of major classics, such as Rig Veda, Upanishads, Bhagavad-Gita, and Yoga-sutras, with some attention also to recent writers such as Tagore, Gandhi, and Radhakrishnan.

**205 Philosophies and Religions of the Far East (3)** A survey of Far Eastern philosophy, religion and scientific thought. Confucianism, Taoism, and the various schools of Mahayana Buddhism, including Zen, are given primary emphasis.

**349 Ideas of the Bible (3)** An introduction to Biblical concepts of revelation, God, man, nature, and redemption, in the light of Hebrew and Greek thought.

**414 Philosophy of Religion (3)** See "Courses in Philosophical Topics," above.

### INDEPENDENT STUDIES AND SEMINARS

**410 Independent Studies (1-3)**

**499 Philosophic Concepts and Systems (3)** An intensive study of the major works of one philosopher, stressing themes and comparison with other views. Required of all philosophy majors. PREREQ: 6 hours of philosophy and senior standing or permission of instructor

# Physical Education

Norman A. Cochran, *Chairperson*
Mildred Lee Greenwood, *Assistant Chairperson — Physical Education Sport and Safety, Coordinator Field Experience*
Emlyn H. Jones, *Coordinator — SDC*
Monita Lank, *Assistant Chairperson — Exercise Science and Graduate Studies*
John N. Trezise, *Coordinator of Required Physical Education Program*
*Barbara Lappano — Barry Remley — Coordinators — Recreation, Leisure, and Dance*

**PROFESSORS:** Donley, Cochran, Lank, Lowe, Serpico

**ASSOCIATE PROFESSORS:** Bonsall, Furlow, Goodwin, Greenwood, Karas, Lorback, Parkinson, Trezise, Wilkinson, Wintermute, Yoder

**ASSISTANT PROFESSORS:** Bitner, Caldwell, Godek, Jones, Lappano, Lauletta, Lepore, Lubking, Pagano, Ray, Remley, L. Smith, P. Smith, Taylor, Thielz, Trnka

**INSTRUCTOR:** I. B. Norris

The Department of Physical Education offers four programs leading to the Bachelor of Science degree.

1. The B.S. in HEALTH AND PHYSICAL EDUCATION — TEACHER CERTIFICATION is for students interested in earning state teaching certification.
2. The B.S. in HEALTH AND PHYSICAL EDUCATION — STUDENT DESIGN is for students interested in preparing for a specific career which is related to health and physical education but does not require teacher certification.
3. The B.S. in HEALTH AND PHYSICAL EDUCATION — PHYSICAL FITNESS is designed for students interested in the exercise sciences. This program provides academic preparation for individuals that seek to plan and conduct physical fitness programs for healthy adults.
4. The B.S. in ATHLETIC TRAINING is designed to meet the needs of students who wish to continue their education in graduate study in such fields as biomechanics, exercise physiology, physical therapy, and adult fitness.

### BACHELOR OF SCIENCE — HEALTH AND PHYSICAL EDUCATION — TEACHER CERTIFICATION

1. General Education Requirements — 51 s.h.
2. Physical Education Theory — 42 s.h.
   PED 100, PED 243, PED 251, PED 257, PED 271, PED 350, PED 351, PED 352, PED 353, PED 361, PED 451, PED 492, PED 489, PED 490
3. Related Requirements — 24 s.h.
   HEA 100, HEA 201, HEA 202, HEA 206 or PED 385, HEA 306, SPC 101, EDF 100, EDP 250
4. Related Requirements that also satisfy the General Education Requirements — 6 s.h.
   CHE 100, BIO 209, BIO 309, PSY 100
5. Required Activities — 11 s.h.
   PED 109, PED 110, PED 111, PED 112, PED 113, PED 140, PED 141, PED 142, PED 143, PED 144, PED 208, PED 209, PED 210, PED 211, PED 212, PED 213, PED 214, PED 242
6. Area of Concentration — 6 s.h.
   Students who do elect an area of concentration must select any six hours of courses from those listed under all areas of concentration
7. Three extra-curricular experiences prior to student teaching

### BACHELOR OF SCIENCE — HEALTH AND PHYSICAL EDUCATION — STUDENT-DESIGNED CONCENTRATION

1. General Education Requirements — 51 s.h
2. Physical Education Theory — 15 s.h.
   PED 100, PED 251, PED 257, PED 271, PED 352, PED 451
3. Related Requirements — 12 s.h.
   HEA 100, SPC 101, HEA 201, HEA 202, HEA 206 or PED 385
4. Related Requirements that also satisfy the General Education Requirements — 6 s.h.
   CHE 100, PSY 100, BIO 209, BIO 309
5. Physical Education Activities — 6 s.h.
6. Student-Designed Curriculum — 34 s.h.
7. Intern Experience — 12 s.h.
8. Extra-Curriculum Experience

### BACHELOR OF SCIENCE — HEALTH AND PHYSICAL EDUCATION — PHYSICAL FITNESS

1. General Education Requirements — 51 s.h.
2. Physical Education Required Courses — 15 s.h.
   PED 113, PED 140, PED 142, PED 207, PED 208, PED 271, PED 348, PED 351, PED 352, PED 361
3. Physical Fitness Specialist Program — 26 s.h.
   PED 454, PED 431, PED 432, PED 433, PED 434, PED 435
4. Physical Education Selected Course — 3 s.h.
   Choose one from PED 448 or PED 453 or PED 376
5. Related Requirements — 9 s.h.
   SPC 101, MGT 301, HEA 303
6. Related Requirements that also satisfy the General Education Requirements — 6 s.h.
   CHE 100, PSY 100, BIO 209, BIO 309, CSC 101
7. Free Electives — 5 s.h.

### BACHELOR OF SCIENCE — ATHLETIC TRAINING

1. General Education Requirements — 51 s.h.
2. Athletic Training courses — 30 s.h.
   PED 271, PED 272, PED 410, PEL 410, PED 411, PEL 411, PED 412, PED 413, PED 414, PED 415, PED 416, PED 417, PED 418, PED 454
3. Related Requirements — 43 s.h.
   HEA 201, HEA 202, HEA 206, HEA 303, PED 352, PED 361, PED 452, PED 453, BIO 117, BIO 209, BIO 309, SPC 101
   An Advanced Psychology elective
   Three credit hours of Physical Activity

4 Related Requirements that also satisfy the General Education Requirement 13 s.h
CHE 103, CRL 103, CHE 104, CRL 104, PHY 103, PHY 104, BIO 110, PSY 100, MAT 105 or MAT 121
Other courses in chemistry, physics, mathematics, and biology may be substituted with approval of program director.

5. Clinical Experience
Clinical experiences are provided in a number of high school, college and university settings. A faculty trainer is in charge of the health care for each sport and a senior and/or junior student is assigned to assist. Athletic training students are not permitted to play varsity sports during their four semester of clinical experience.

### SUMMER COURSE WORK IN ATHLETIC TRAINING

A great many students have taken the summer courses which were a part of the Athletic Training Education Program the past 13 years. The students were either undergraduates at colleges where there was no approved education program in athletic training or they were graduate students seeking to qualify to take the national certification exam. The course work offered in the summer will consist of those subjects which are fundamental to the profession of athletic training, i.e. PED 410 and PEL 410 Physical Modalities, PED 411 Therapeutic Exercise, PED 412 Pathology, and PED 413 Evaluation of Injury and Illness. A total of 12 credits offered in a 9 week block will be offered

Students interested in taking the summer session block of courses should contact. Athletic Training Education Program Director, West Chester University of Pennsylvania, West Chester, PA 19383.

### AREAS OF SPECIALIZATION

### SECONDARY PHYSICAL EDUCATION

Preparation for Teaching (PED 310), Principles of Coaching (PED 452). PED 311, 314, 316, 318, 319, 320, 321, 322, 323, 324, 326, 327, 328, 331, 453, 454, 430.

### ELEMENTARY PHYSICAL EDUCATION

Elementary Physical Education Curriculum (PED 354). PED 340, PED 440, PED 453, PED 449.

### DANCE MINOR

Required Core: Fundamental Movement (PED 141); Modern Dance I (PEA 132); Jazz Dance I (PEA 133); History of Dance (PED 344); Choreography (PED 441). This is a two-track program (21 credits). Beyond the required core courses the student may select course(s) under educational concentration or theatrical performance concentration.

### DRIVER-SAFETY EDUCATION — 12 S.H. FOR STATE CERTIFICATION

**Required:** Accident Causation and Prevention (PED 355); Critical Problems Within the Highway Transportation System (PED 356); High School Driver Education Program Management (PED 450); Introduction to the Driver Task (PED 456). NOTE: Meets state certification requirements for driver-safety education

### ATHLETIC TRAINING — 32 S.H. FOR NATA CERTIFICATION

**Required:** PED 271, 272, 410, PEL 410, PED 411, PEL 411, PED 412, 413, 414, 415, 416, 418, 454, HEA 303

### SPECIAL PHYSICAL EDUCATION

PED 362, PEL 362, PED 360, PED 457, PED 379

### SECONDARY HEALTH EDUCATION

HEA 103, 105, 106, 301, 305, 401. Mental Health (HEA 410); Contemporary Social Problems (SOC 250); Basic Ecology (BIO 203).

### RECREATION AND/OR OUTDOOR EDUCATION

This is a two-track program. The student may, under advisement, select courses in recreational services and/or outdoor education. Arts & Crafts (PED 367), Leadership in Recreation (PED 368), Principles of ROPE (PED 369), Camp Counseling (PED 370), Wilderness Adventure I (PED 371), Wilderness Adventure II (PED 372), Outdoor Recreation (PED 375), Recreational Games (PED 376), Intramural & Recreation Sports (PED 377), Supervised Camp Leadership (PED 467), Leadership in Recreational Outdoor Pursuits (PED 470), Planning Facilities for Athletics, Physical Education and Recreation (PED 430).

### NON-DEGREE PROGRAMS

Certification in Driver Education and Safe Living (Highway Safety and General Safety Education).

Completion of the following program will enable teachers to endorse their teaching certificates with this area. Students must apply for the endorsement through the office of the faculty director of the School of Education.

PED 355, 356, 450, 456 12 s.h

The program may be taken in whole or in part during summer sessions. Some of the courses are also offered in spring and fall semesters.

### COACHING MINOR*

Those students who successfully complete the program at West Chester earn a transcript and written endorsement from the School of Health Sciences attesting to school administrators that recipients have attained basic preparation for coaching. The program is a model for a needed broadening of coaching standards. Students pursuing the B.S. in Health and Physical Education automatically achieve coaching certification

Certification requires competencies equivalent of fifteen (15) to eighteen (18) hours of course work. Behavioral competencies in the theoretical foundations of coaching; skill acquisition; and management techniques are also required. Course offerings at both the undergraduate and graduate levels are available. The program is open to any person who applied for admission through the program advisor, Mr. Lorback. Applicants should direct inquiries to that office.

### RECREATIONAL OUTDOOR PURSUITS EDUCATION CERTIFICATE PROGRAM

Recreational Outdoor Pursuits Education is that aspect of outdoor recreation that is concerned with adventure activities and using the natural environment to attain educational goals.

West Chester University has since 1971 offered a variety of outdoor pursuits courses as well as a concentration in Recreational Outdoor Pursuits. During this time there has been an increased interest in Adventure Education by schools, state agencies, camps, and adventure programs with an expanded demand for qualified individuals to serve as leaders and instructors.

This growth has been accompanied by an increased demand for competent individuals who can provide safe, as well as educationally, sound experiences. The Recreational Outdoor Pursuits Education Certificate Program has been designed to provide the student with the knowledge, skills, and experience necessary to conduct safe and educationally sound outdoor pursuits experiences and to provide the student with tangible evidence of his or her level of competency.

*Pending approval of the State System of Higher Education

A student who successfully completes the 25 semester hours of required and elective courses and the related non-credit requirements of the program will receive a certificate, transcript recognition, and written endorsement from the School of Health Sciences attesting to his/her depth of training, proficiency in skills, and leadership abilities.

## FACILITIES

Facilities to support the programs of the department have kept pace with a rapid increase in students and faculty. The Health and Physical Education Center and field complex, located on south campus, provide the University with one of the nation's outstanding facilities for education and research in health and physical education. Among the center's notable components are its research facilities, its multipurpose teaching stations, and a one-acre gymnasium divisible into six separate pneumatically sealed gymnasiums. A vast complex of tennis courts and baseball, lacrosse, field hockey, soccer, and football fields are also located on the south campus.

---

## COURSE DESCRIPTIONS

### PHYSICAL EDUCATION ACTIVITY COURSES

Symbol: PEA (2) (1)

**The first number in parentheses shows the number of class meetings per week. The second one shows the semester hours of credit.**

A program of selected activities for all students. (Formerly designated PED 101-102)

**100 Basic Swimming** (nonswimmers)
**101 Swimming Styles** (strokes)
**102 Springboard Diving**
**103 Advanced Life Saving**
**104 Skin & Scuba Diving***
**105 Sailing***
**106 Canoeing**
**107 Orienteering**
**108 Rock Climbing & Rappelling**
**109 Backpacking & Camping**
**110 Cycle Training**
**111 Cross Country Skiing***
**112 Horsemanship***
**113 Angling**
**114 Skiing, Downhill***
**115 Physical Conditioning**
**116 Personal Defense**
**117 Karate***
**118 Ice Skating***
**119 Archery**
**120 Badminton**
**121 Bowling***
**122 Fencing**
**123 Golf**
**124 Gymnastics Men**
**125 Gymnastics Women**
**126 Handball/Racquetball***
**127 Squash**
**128 Tennis**
**129 Basketball**
**130 Softball**
**131 Volleyball**
**132 Modern Dance I**
**133 Modern Jazz I**
**134 Ballet I**
**135 Tap Dancing**
**136 Fitness for Life (Theory & Lab)**

* Additional Fee

**138 Judo***
**140 Aerobics/Jazzercise**
**190 General Activity**
**201 Power & Competitive Swimming**
**212 Advanced Horsemanship***
**214 Advanced Skiing***
**228 Advanced Tennis**
**231 Advanced Volleyball**
**232 Modern Dance II**
**233 Modern Jazz II**
**234 Ballet II**

**236 Developing Personal Fitness Programs (2) (2)** This course is designed to provide the student with a basic understanding of the scientific basis of physical fitness. The course is intended to help each student in developing a personal fitness profile and subsequent program of physical activity that will result in healthful living. The course will make use of practical experience and actual participation in fitness activities. Individual progress will be emphasized. Evening degree candidates only.

### PHYSICAL EDUCATION

Symbol: PED

**The first number in parentheses shows number of class meetings per week; the second one shows semester hours of credit.**

**100 Foundations of Physical Education (2) (2)** An introduction to the discipline and profession of physical education and sport, with an emphasis on career guidance. The history and tradition of the field will be traced to provide perspective for student choices during their undergraduate education. Field experiences and advice will expose students to the current opportunities and methods for achieving personal goals.

**107 Music and Movement (2) (1)** A course which examines and develops the perception of rhythm through movement.

**109 Wrestling (9 weeks) (3) (½)** The teaching of the basic skills of the sport of wrestling. Fundamental skills, tactics, rules and combative lead-up activities for presentation to physical education classes in the public schools.

**110 Soccer (9 weeks) (3) (½)** The teaching of the basic skills of the sport of soccer. Fundamental skills, tactics, rules and lead up games are presented for all school ages.

**111 Basketball (9 weeks) (3) (½)** Emphasis is placed upon fundamental skills, rules and tactics of the sport, accomplished through drills and game situations.

**112 Gymnastics I (3) (1)** Apparatus skills, stunts, tumbling, and pyramids for teaching all age levels.

**113 Physical Conditioning (9 weeks) (3) (½)** The teaching of activities to help develop total health, especially physical fitness. Circuits of exercises, weight training, running and rope jumping are included for all ages.

**140 Lifesaving (3) (1)** Review of basic aquatic skills. Emphasis of lifesaving practices, safety and survival techniques. Successful completion of this course may lead to advanced lifesaving certification by the American Red Cross.

**141 Fundamental Movement (3) (1)** Fundamental locomotor and axial movement, music and rhythm in relationship. Rhythmical activities for the elementary program with suggested teaching methods.

**142 Tennis (9 weeks) (3) (½)** An explanation of the mechanics and specific skills of tennis. Emphasis is placed on conceptual understanding and the teaching progressions and methods.

**143 Golf (9 weeks) (3) (½)** The teaching of the basic skills of golf. Class management, techniques, rules and safety procedures to present this activity to physical education classes.

**144 Archery/Badminton (9 weeks) (3) (½)** The teaching of the basic skills of archery and badminton. Class management, techniques, rules and safety procedures to present these activities to physical education classes.

**200 Elementary School Physical Education (3) (2)** Theoretical and practical approach for the teaching of physical activities to elementary school children by the classroom teacher.

**208 Self Defense (9 weeks) (3) (½)** The teaching of the basic skills of self defense. Fundamental skills, tactics and methods of presentation to school aged groups.

**209 Track and Field (9 weeks) (3) (½)** Principles of running, throwing, jumping. Modification needed for physical education classes. Self-testing.

**210 Softball/Baseball (9 weeks) (3) (½)** The teaching of the basic skills of softball and baseball. Fundamental skills, tactics, rules and lead up games for presentation to all ages.

**211 Hockey (9 weeks) (3) (½)** Basic fundamentals, tactics, and rules. Modified active games. Geared to teaching physical education classes.

**212 Football (9 weeks) (3) (½)** The teaching of the basic skills of football. Fundamental skills, tactics, rules and lead up games for all school ages.

**213 Lacrosse (9 weeks) (3) (½)** Basic fundamentals, tactics, and women's rules. Modified active games. Geared to teaching physical education classes.

**214 Volleyball (9 weeks) (3) (½)** The teaching of the basic skills of volleyball. Fundamental skills,

tactics, rules and lead-up games for all school ages.

**215 Dance Exercise and Movement (3) (1)** Basic course offering methods and materials for Teaching Dance Technique.

**242 Dance (3) (1)** To provide to the student a generalized coverage of various dance forms that could be taught within the educational field. Examples of these would be social dance, folk dance, square dance, aerobics or jazzercize, etc.

**243 Preparation for Teaching Activities (3) (1)** Methods of teaching in all areas of physical education and the development of appropriate lesson plans for all ages. PREREQ: 4 activity courses.

**251 Physical Activity for Special Children (3) (3)** A course of adapted physical education. Common childhood disabilities are studied, with emphasis on problems of a chronic nature. Also screening and practical training, working with physically and mentally handicapped children.

**252 Classroom Activities for the Special Child (3) (3)** To acquaint special education teachers with physical education activities useful in the classroom and developmental in nature. PREREQ: BIO 209

**257 Principles and Practices of Recreation (3)** The basic principles of planning, administering and evaluating recreational programs for all ages in a variety of settings and participation in suitable recreational activities.

**271 First Aid and Athletic Training (3) (2)** A course designed to qualify students in American Red Cross first aid and CPR and to introduce the principles of athletic injury prevention and management. Offered fall and spring semesters.

**272 Athletic Training Techniques (3) (2)** A course designed to develop basic athletic training competencies for beginning athletic training students Offered fall and spring semester. PREREQ PED 271.

**275 Lifeguarding (3) (2)** Theory and techniques relative to preventive lifeguarding, emergencies in and around water, water rescues, search and recovery operations, types and uses of equipment, records and reports, health and sanitation, and supervision of waterfront areas.

**310 Preparation for Teaching Secondary Physical Education (3) (2)** Each student develops a physical education activity unit and teaches one lesson from that unit. Further opportunities for familiarization with various teaching methods and styles through observation, demonstration lessons, and actual practice

**311 Coaching Racket Sports (3) (3)** Advanced coaching and teaching techniques for the racket sports including tennis, badminton, racketball and squash

**314 Track and Field II (3) (2)** PREREQ. PED 209.

**316 Basketball II (3) (2)** PREREQ: PED 111.

**318 Lacrosse II (Women's equipment) (3) (2)**

**319 Lacrosse II (Men's Equipment) (3) (2).**

**321 Volleyball II (3) (2)** PREREQ: PED 214

**322 Soccer II (3) (2)** PREREQ: PED 110

**323 Field Hockey II (3) (2)** Individual and team tactics and special situations. Basic knowledge needed for coaching hockey PREREQ: PED 211

**324 Football II (3) (2).**

**326 Wrestling II (3) (2)** PREREQ: PED 109

**327 Gymnastics II (Women's equipment) (3) (2)** Teaching and coaching techniques for apparatus stunts, tumbling, pyramids PREREQ PED 113

**328 Gymnastics II (Men's equipment) (3) (2)** Advanced work on gymnastics apparatus including trampoline, with emphasis on teaching progression, spotting techniques, and class safety PREREQ. PED 112.

**331 Water Safety Instruction (3) (2)** Leadership procedure in aquatics activities for schools and school camps. Swimming strokes and life saving techniques are analyzed Opportunity to qualify as a waterfront safety instructor

**340 Self Testing Activities in Elementary School Physical Education (2) (2)** Theory and methods to present activities to children on an individualized self-testing basis. The opportunity is provided for direct contact with children to try out the self-testing activities and prepare individualized programs.

**343 Modern Dance II (3) (1)** Emphasis is placed on longer combinations and more complex problem-solving themes. PREREQ: PED 215.

**344 History of Dance (3) (2)** Evaluation of dance as an art form in relation to man and his society. Physiological, sociological, and psychological implications; dance forms and types. Film and other materials focus on parallel developments in related arts

**345 Dance Production Workshop (3) (2)** Study of the various elements of performance and dance production All are integrated into a final performance which is created and directed by the students. Admittance is through auditions during the fall semester

**348 Teaching Aerobics/Jazzercize (2) (1)** The purpose of this course is to teach various dance exercises, dance movements and aerobic dance routines to music with the intent of promoting cardiovascular fitness and endurance and improving muscle tone and coordination

**PED 349 Advanced Social/Folk/Square (3) (2)** This course is designed to continue beyond the beginner level

**350 Teaching Physical Education in the Elementary Grades (6) (3)** Students are assigned to elementary schools for teaching and observation with cooperating teachers and college supervisors. (Mon -Wed.-Fri 1-3 p.m.) PREREQ PED 243.

**351 Evaluation in Health and Physical Education (3) (3)** Selecting, administering, scoring, and evaluating tests of physical fitness, general motor ability, motor educability, and skill and knowledge

**352 Applied Exercise Physiology (3) (3)** The application of physiological principles to physical education, exercise, and sport. PREREQ: BIO 309

**353 Organization and Administration of Physical Education, Health and Athletics (3) (3)** Principles of program building in curricular and extracurricular programs; organizing, administering, and supervising physical education, health, intramural and interscholastic programs.

**354 Elementary Physical Education Curriculum (3) (3)** Constructing and evaluating the curriculum in elementary physical education Progression and continuity along with developmental needs and interest of children, are considered

**355 Accident Causation and Prevention (3) (3)** Survey of safety education. History, philosophy, and psychology of accident prevention

**356 Critical Problems Within the Highway Transportation System (3) (3)** Techniques of assessing the knowledge, skill and psycho-physical characteristics of a beginning driver; the relation of these to the safe operation of a motor vehicle

**360 Pathology of Special Physical Education and Therapeutic Recreation (2) (2)** Considerations of the commonly seen disabling conditions in special physical education with regard to anatomical and physiological changes and differences in their prognosis.

**361 Kinesiology (3) (3)** Basic fundamentals of movement, articulation, muscular actions; analysis of the related principles of mechanics. PREREQ BIO 209

**362 Therapeutics for Special Physical Education (3) (3)** A course for those students interested in the special physical education concentration. Manual muscle testing, ROM measurement, orthopedic evaluations, principles of therapeutic exercise, and guidelines for exercise programs for those handicapping conditions commonly seen in schools are presented. PREREQ: BIO 109, BIO 309, PSY 100, HEA 206, PED 251, PED 352, PED 361 Concurrently with PEL 362.

**PEL 362 Therapeutics for Special Physical Education, Lab (3) (2)** A course designed to give those students enrolled in PED 362 practical experience in those topics presented in PED 362. PREREQ: Concurrently with PED 362.

**367 Arts and Crafts in Recreation (3) (3)** Theoretical and practical applications of arts and crafts as recreative outlets for all age groups. Arts and crafts materials customarily found in school, camp, and community recreation programs are used.

**368 Leadership in Recreation (3) (3)** Basic concepts and leadership techniques, studied in various recreation settings. Opportunities for students to practice and develop their own techniques through work in community recreation agencies.

**369 Principles of Recreational Outdoor Pursuits Education (3) (3)** History, philosophical background, objectives, educational strategies, curriculum, safety considerations, and administration of an adventure-based outdoor pursuits program.

**370 Camp Counseling (3) (3)** Theory and practice in camping and outing programs, approached from viewpoints of the camper, counselor, supervisor, specialists, and director.

**371* Wilderness Adventure I (2)** A course designed to provide the participant with a wilderness backpacking experience. This program utilizes the environment and adventure activities to develop self confidence, camping and backpacking skills, concern for others, and a better understanding of the environment.

**372* Wilderness Adventure II (2)** This course is designed to provide the participant with an experiential outdoor pursuits experience utilizing the bicycle as the primary mode of transportation. Students will tour through rural country learning biking and camping skills as they travel.

**373* Wilderness Adventure III (2)** This program is designed to offer adventure and learning by utilizing the white water river environment The course is designed to instruct students in camping, basic, and white water canoe skills and it will culminate with a day wilderness river trip.

**375 Outdoor Recreation (3) (3)** The purpose of this course is to acquaint the student with the role outdoor recreation plays in today's society. The student will develop an appreciation for the outdoors through participation in outdoor recreation programs and learning skills necessary to participate in the program

**376 Recreational Games (3) (2)** This course is designed to provide the student with the skills, techniques and available resources involved in planning and directing recreational games Instruction includes selection of games, activities and opportunities for practical application of interested students

**377 Intramural and Recreational Sports (3) (3)** A study of the basic ingredients required for admin-

*Additional fee required

istering successful intramural programs The student serves in the intramural office and program as a student leader and supervisor. In addition, the student will study the rules, regulations, and policies of community sports with national headquarters and leadership.

**378 Field Experience (3) (3)** Designed as a practical exposure in the field of the student designed concentration. Students must solicit approval of the appropriate agency, develop proposal for on-site experience, and secure agreement from faculty advisor

**379 Therapeutic Recreation (3) (3)** This course is designed to familiarize the student with that segment of the population having special needs. The course will combine lecture and "hands on" experiences with as many of the different groups as possible in the settings they are found in the community. PREREQ: PED 251 and PED 257 or instructor's permission.

**380 Women and Sport (3) (3)** An examination of women's participation in sport from historical, cultural, psychological, physical and legal perspectives; emphasis placed upon women in sport in American society today.

**385 Exercise, Play and Development (3) (3)** To provide physical education majors with a thorough understanding of the role of exercise and play in physical and motor development throughout the lifespan.

**410 Therapeutic Modalities for Athletic Training (3) (3)** Physical agents used in athletic training are presented with regard to the physics, physiological effects, indications, contra-indications and progression Offered in the summer only. PREREQ: PED 352, 361.

**PEL 410 Therapeutic Modalities for Athletic Training Lab (2) (1)** Lab experiences in the application of physical agents presented in PED 410. Offered in the summer only. PREREQ PED 410.

**411 Therapeutic Exercise for Athletic Training (3) (3)** The principles, objectives, indications, contra-indications and progression of various exercise programs utilized in the rehabilitation of athletic injuries are presented. Offered in the summer only PREREQ PED 352, 361.

**PEL 411 Therapeutic Exercise for Athletic Training Lab (2) (1)** Lab experiences in the application of exercises presented in PED 411 Offered in the fall semester only. PREREQ PED 411.

**412 Pathology for Athletic Training (3) (3)** A presentation of the pathological considerations for conditions commonly seen in athletics. Offered in the summer only. PREREQ: PED 410, 411

**413 Athletic Injury/Illness Evaluation (3) (3)** A presentation of the evaluation techniques required to evaluate athletic injuries and illnesses including practical experiences in the techniques. Offered in the summer only. PREREQ: PED 410, 411, 412.

**414 History, Organization and Administration of Athletic Training (2) (2)** A presentation of the historical and current perspectives of athletic training and techniques for organizing and administering athletic training programs. Offered in the spring semester only.

**415 Athletic Injury Management I (2) (2)** Clinical experience of 200 or more hours with specific behavioral objectives in the management of illness, injuries of the lower extremity and equipment fit Offered in the fall semester only. PREREQ: PED 410, PEL 410, PED 411, PEL 411, PED 412, 413

**416 Athletic Injury Management II (2) (2)** Clinical experience of 200 or more hours with specific behavioral objectives in the management of injuries to the shoulder girdle and upper extremity Offered in the spring semester only. PREREQ PED 415.

**417 Athletic Injury Management III (2) (2)** Clinical experience of 200 or more hours plus specific behavioral objectives for the management of neurological conditions and conditions of the head, neck, spine and trunk. Offered in the fall semester only. PREREQ: PED 416

**418 Athletic Injury Management IV (2) (2)** Clinical experience of 200 or more hours plus specific behavioral objectives for the management of conditions of the internal organs, systemic disorders and the skin Offered in the spring semester only. PREREQ: PED 417.

**430 Planning Facilities for Athletics, Physical Education and Recreation (3) (3)** Management and planning of the facilities for athletics, school physical education, and recreational programs, playfields, playgrounds, buildings and auxiliary structures as well as the maintenance of these facilities.

**431 Physical Fitness Assessment and Exercise Prescription (3) (3)** Designed to prepare students to assess the physical fitness levels of healthy but sedentary adults and prescribe individualized exercise programs. PREREQ: BIO 209, 309, PED 352.

**432 Exercise Techniques/Theory and Practice (3) (3)** Analysis of various exercise techniques, devises and systems emphasizing their use and safety. Clinical experience in strength and ROM, testing and prescription PREREQ: BIO 209, PED 361

**433 Exercise and Stress Management (3) (3)** Focuses on the use of exercise in the management of stress. The course includes exercise techniques that may be useful in alleviating stress.

**434 Organization and Management of Adult Fitness Programs Clinic/Seminar (3) (3)** Designed to provide students with practical experience in organizing and managing physical fitness programs for adults PREREQ: BIO 209, 309, PED 352, 361, 431, 433

**435 Physical Fitness Specialist Internship (12) (6) (6)** Experience working in a cardiovascular rehabilatory center or similar clinical setting under the supervision of qualified personnel for one-half semester and practical experience in an adult physical fitness center under the supervision of qualified personnel for one-half semester PREREQ. BIO 209, 309, PED 352, 361, 431, 433.

**440 Movement Education in Elementary Physical Education (2) (2)** Teaching techniques and subject matter for a program of movement education suitable for children Designed to help children develop awareness of the body and space in order to develop effective movement patterns.

**441 Principles of Choreography (3) (1)** The art of dance composition. Basic elements of space, rhythms, and motion dynamics. Students design original movement, progressing from simple to complex solo and group forms. PREREQ PED 215

**443 Dance and Theatre Arts (3) (2)** Advanced level modern dance techniques, with emphasis on all aspects of production: accompaniments, costume, sets and lighting.

**444 Organization and Management of Aquatic Facilities (3) (3)** A study of the organization and administration of aquatic recreational areas, including ocean, natural fresh water and manmade facilities. The student will acquire the skills and understandings necessary to develop aquatic programs and/manage aquatic facilities. Spring semester only

**445 Dance/Movement for Special Groups (2) (2)** Adaptation of dance movement with emphasis on methods, techniques, and activities suitable for special groups (elderly, disabled, mentally retarded, special groups).

**446 Repertory Performance (2)** The purpose of this course is to offer the dance students enrolled the invaluable experience that can only be gained from performance. To ensure maximum benefit, the objectives are thorough studio rehearsal of dances, thorough lighting and staging rehearsals, and well-directed performances

**449 Learning on the Move (3) (3)** A combination of movement education and perceptual motor theory and activities to help teachers and parents guide the children to maximum developmental potential. Pre-school, nursery, and kindergarten ages.

**450 High School Driver Education Program Management (3) (3)** A study of the total safety program, with emphasis on the teaching of safety Each student prepares a practice lesson.

**451 History, and Philosophy of Health and Physical Education (2) (2)** A study of past and present concepts of physical education; philosophy and principles of modern physical education programs

**452 Principles of Coaching (2) (2)** Principles and methods of coaching sports in the school program

**453 Motor Learning (2) (2)** A study of the theories of learning in relation to the acquisition of motor skills

**454 Physical Fitness for Athletics (2) (2)** A course to help equip the student to design and manage year round conditioning programs for athletes. PREREQ: PED 352, 361.

**456 Introduction to the Driving Tasks (3) (3)** An advanced course to prepare students to teach driver education in the secondary schools

**457 Psychology of Physical Disability (3) (3)** A course designed for students in special education Psychology applied to physical disability; personal and cultural implications of handicaps; the psychodynamics of disability

**458 Physical Disabilities of Childhood (2) (2)** A course designed for students in special education Common orthopedic and neurological disabilities of childhood, especially chronic deviations. Emphasis is on understanding the medical aspects and problems of rehabilitation

**470 Leadership in Recreational Outdoor Pursuits (3) (3)** This course is designed to provide instruction which would help persons desiring to pursue a career in recreational outdoor pursuits education, or develop an outdoor education or physical education program utilizing outdoor pursuits, activities, processes, and educational methodology develop the background to do so in a safe and meaningful manner

**473 Independent Study and Special Projects (1-3)** Provide an opportunity for selected students to pursue areas of special interest and talent or to take advantage of special conferences and/or seminars. PREREQ approval of department chairperson.

**475 Mental Training In Sport (3) (3)** Techniques of mental training for sport and physical activity including relaxation training, concentration skills, breathing regulation, positive imagery, autogenic training and hypnosis

**489 Student Teaching (6)** Observation and participation in teaching situations in elementary, junior and senior high schools under qualified cooperating teachers and college supervisors. PREREQ. PED 243, 350, 353, HEA 206, 306, extra-curricular requirement and updated medical examination

**490 Student Teaching (6)** Observation and par-

ticipation in teaching situations in elementary, junior and senior high schools under qualified cooperating teachers and college supervisors. PREREQ PED 243, 350, 353, HEA 206, 306, extra-curricular requirement and updated medical examination

**491 Internship (3-12)** Interns will perform a variety of services to the agency It is expected that interns will be involved in meaningful work projects during the placement with adequate time to interact with their work supervisors for questions, answers and knowledge sharing. PREREQ Acceptance of final S.D.C. proposal.

**492 Principles and Practices of Teaching (2)** Deals with the professional preparation of the major health and physical education teacher certification student It is offered concurrently with the student teaching experience and is designed to assist the student in the public school setting. An examination of current problems and issues in the profession and in the schools leads to discussion of problem prevention and solution. Lectures on job procurement skills are included

# Physics and Pre-Engineering

Harold L. Skelton, *Chairperson*

**PROFESSORS:** Rickert, Smith, Yarosewick

**ASSOCIATE PROFESSORS:** Hawkes, Kaplan, Skelton

The Department of Physics at West Chester University offers three undergraduate degree programs. These are programs leading to the Bachelor of Science in physics, the Bachelor of Science in Education, and a cooperative five year program with Pennsylvania State University leading to a B.S. in physics from West Chester University and a B.S. in engineering from Pennsylvania State University.

For freshman admission into the physics program a student should have completed, in addition to the general University requirements, one year each of chemistry and physics, a minimum of three years of mathematics including advanced algebra and trigonometry, and SAT score of 1000 (465 Verbal, 535 Math). Any student with a deficiency must complete ENG 120 and MAT 141 with grades of C or better to be admitted into the program.

West Chester has a chapter of the National Physics Honor Society, Sigma Pi Sigma.

A minor program in physics is also available.

## BACHELOR OF SCIENCE — PHYSICS

The physics program at West Chester is designed as preparation for graduate school or careers in government or industry The curriculum includes a strong foundation in mathematics and the humanities. It is structured on an experimental as well as theoretical basis. A wide choice of electives in the B.S. program provides the flexibility to develop a concentration in some specific area of interest. Two such concentrations have been developed by this department with the aid of faculty from the Departments of Mathematical Sciences and Geology and Astronomy.

1. Physics Concentration Requirements
   A. PHYSICS: PHY 170, 180, 240, 300, 310, 320, 330, 350, 420, 430; an additional 6 s.h. in physics must be chosen from available electives at or above the 300 level.
   B. MATHEMATICS MAT 110, 141, 142, 241, 242, 343, CSC 141
   C. CHEMISTRY: CHE 103, 104, CRL 103, 104
2. Concentrations. Choose between:
   A. Computer Science Option. The student uses electives from his program to complete the following sequences of courses: CSC 241, 361, 371, MAT 211, 425.
   B. Geology-Geophysics Option. In this program, electives are used to complete the sequence of courses: ESS 201, 211, 302, 305.

Candidates for the B.S. degree in physics must satisfy a foreign language requirement at the 102 level. In physics the recommended languages are French, German, or Russian.

Students must complete the physics sequence with a G.P.A. of 2.0 or greater. Majors shall not have more than one repeat of a physics course. Transfer students must take a minimum of 15 or more physics credits at West Chester at the 300 level and above for graduation.

## BACHELOR OF SCIENCE IN EDUCATION — PHYSICS

The B.S. program in physics education provides a solid background in physics, mathematics, and related science for a teaching career at the secondary level and leads to certification to teach physics in the public schools of Pennsylvania

1. Physics Concentration Requirements
   A. PHYSICS: PHY 170, 180, 240, 300, 310, 320, 330, and 410 or 430.
   B. MATHEMATICS: MAT 110, 141, 142, 241; MAT 343 or PHY 370
   C. SCIENCES: CHE 103, 104; CRL 103, 104; Astronomy elective; Biology elective; Computer Science elective
2. Professional Education Requirements
   See page 60.

## BACHELOR OF SCIENCE — PHYSICS/BACHELOR OF SCIENCE — ENGINEERING

The Department of Physics offers a cooperative engineering program with the Pennsylvania State University requiring three years in residence at West Chester University plus two years in residence at Pennsylvania State University for study in engineering. At the end of this period the student receives two baccalaureate degrees; a B.S. in Physics from West Chester and a B.S. in Engineering from Penn State.

Admission to the Pennsylvania State University is contingent upon a recommendation of West Chester University upon the student having maintained the overall average for the specific engineering major. Students who have completed a bachelor's degree are not eligible for transfer to Penn State in this program.

Areas of study in engineering are:

Aerospace Engineering
Agricultural Engineering
Ceramic Science
Chemical Engineering
Civil Engineering
Electrical Engineering
Engineering Science
Environmental Engineering
Industrial Engineering
Mechanical Engineering
Metallurgy
Mining Engineering
Nuclear Engineering
Petroleum and Natural Gas Engineering

Physics Concentration Requirements

A. PHYSICS: PHY 170, 180, 115, 116, 240, 260, 300, 310, 320; an additional 6 s.h. in physics at or above the 300 level must be chosen depending on the engineering area selected.
B. MATHEMATICS: MAT 110, 141, 142, 241, 242, 343, CSC 141
C. CHEMISTRY: CHE 103, 104, CRL 103, 104

Students intending to enroll in chemical engineering must have in addition CHE 231 and 232; in mining engineering, ESS 201, 302, ESL 201; and petroleum and natural gas engineering, ESS 201, 211, ESL 201. Students intending to enroll in aerospace, electrical, or nuclear engineering must take PHY 370 and PHY 420.

## MINOR IN PHYSICS

The program offers a scientific background as a preparation for a variety of career choices, e.g., business majors interested in careers in technologically-oriented industries; majors interested in technical scientific sales; English majors interested in technical writing; social science majors interested in the area of energy and the environment.

Required: PHY 130, 140, or PHY 170, 180; also PHY 240. In addition select 8 s.h. of physics courses at the 300 level or above, chosen under advisement of the Physics Department. Transfer students must take a minimum of six credits at West Chester at the 300 level or above.

## COURSE DESCRIPTIONS

PHYSICS
Symbol: PHY

**(3-2) represents 3 hours lecture and 2 hours lab.**

★**100 Elements of Physical Science (3)** A study of motion, energy, light and some aspects of modern physics stressing a conceptual and historical understanding

**115 Engineering Graphics I (1)** Use and preparation of engineering drawings. Topics include use of instruments, linework, geometric construction, lettering, the four types of projections, dimensioning and sections.

**116 Engineering Graphics II (1)** A continuation of PHY 115, to include the following topics: Layout, detail and assembly drawings, developments, auxiliary drawings, various types of drafting, machine tool processes and computer drafting PREREQ PHY 115

†**130 General Physics I (4)** An introductory noncalculus physics course Mechanics of solids and fluids, wave motion, heat and temperature, thermodynamics, and kinetic theory. (3-2). PREREQ: algebra and trigonometry

†**140 General Physics II (4)** An extension of PHY 130. Electricity and magnetism, geometrical and physical optics, and modern physics (3-2) PREREQ PHY 130.

†**170 Physics I (4)** An introductory course. Mechanics of solids and fluids, heat, temperature, thermodynamics, the kinetic theory, and wave motion. (3-2, 1 hour recitation) PREREQ MAT 141 or MAT 161

†**180 Physics II (4)** An extension of PHY 170. Electricity and magnetism, geometrical and physical optics, and modern physics. (3-2, 1 hour recitation) PREREQ: PHY 170, CONCURRENT. MAT 142 or MAT 162

★Approved Distributive Requirement Course
†PHY 170-180 and PHY 130-140: Approved two-semester distributive requirement substitutes

**240 Introduction to Modern Physics (3)** An atomic view of electricity and radiation, atomic theory, special relativity theory, X-rays, radioactivity, nuclear fission, and introductory quantum mechanics PREREQ: PHY 180 or 140, MAT 142 or 162.

**260 Engineering Statics (3)** Composition and resolution of forces, equivalent force systems, equilibrium of particles and rigid bodies, centroids and center of gravity, analysis of simple structures, internal forces in beams, friction, moments and products in inertia, methods of virtual work PREREQ: PHY 170 or PHY 130.

**300 Mechanics (3)** Particle kinematics, dynamics, energy and momentum considerations Oscillations. Central force motion. Accelerated reference frames. Rigid body mechanics. Lagrangian mechanics. PREREQ: PHY 180 or PHY 140, MAT 142 or MAT 162.

**310 Intermediate Physics Laboratory I (2)** A course to familiarize students with laboratory equipment and methods. PREREQ PHY 240.

**320 Intermediate Physics Laboratory II (2)** A continuation of PHY 310. PREREQ. PHY 310.

**330 Electronics I (3)** Laboratory study of standard electronic circuits — amplifiers, oscillators, power supplies, test circuits Some theory of solid state. (2-2) PREREQ: PHY 180 or 140.

**340 Fundamentals of Radioisotope Techniques (3)** Biological, chemical, environmental, and physical effects of nuclear radiation. Radiation detection instrumentation and radio tracer methodology (2-2) PREREQ: CHE 104 and PHY 180 or PHY 140.

**350 Heat and Thermodynamics (3)** Equations of state, first and second laws of thermodynamics, ideal and real gases, entropy, and statistical mechanics PREREQ OR CONCURRENT: PHY 240, MAT 242.

**370 Mathematical Physics (3)** Selected topics in mathematics applied to problems in physics, ordinary differential equations, vector calculus, Fourier analysis, matrix algebra and eigenvalue problems PREREQ: MAT 241 and PHY 180 or 140.

**400 Analytical Dynamics (3)** Wave propagation, Lagrange's equations and Hamilton's principle, rigid body motion, and special relativity. PREREQ. PHY 300, MAT 343.

**410 Optics (3)** Geometrical and physical optics. Reflection and refraction at surfaces, lenses, interference and diffraction, polarization PREREQ PHY 180 or 140, PREREQ OR CONCURRENT: MAT 242.

**420 Atomic Physics and Quantum Mechanics (3)** Fundamental concepts of quantum mechanics with application to atomic physics. Topics covered are Bohr model, Schrodinger equation with applications, perturbation theory, helium atom, and scattering theory. PREREQ: PHY 240, PHY 300, and MAT 343 or PHY 370.

**430 Electricity and Magnetism (3)** Electrostatics of point charges and extended charge distributions, fields in dielectrics, magnetic fields due to steady currents. Ampere's Law, and induced emfs, topics in electromagnetic waves as time permits. PREREQ: PHY 300, MAT 343 or PHY 370.

**440 Microcomputer Electronics (3)** Laboratory study of special circuits, integrated circuits, microcomputers, and microcomputer interface applications. PREREQ. PHY 330.

**450 Advanced Physics Laboratory I (1-3)** A course to familiarize students with contemporary laboratory equipment and methods

**460 Advanced Physics Laboratory II (1-3)** A continuation of PHY 450.

**470 Seminar in Physics (1)** Oral and written reports on approved topics. Variation in topics from year to year depending on the interest and needs of students.

**480 Special Topics (1-3)** Topics of special interest to be presented once or twice. PREREQ: To be specified by the instructor. Course may be repeated by student for credit any number of times when different topics are presented

**490 Introduction to Research (1-9)** Specific problems in consultation with the faculty advisor PREREQ: Consent of instructor

# Pre-Medical Program

Philip B. Rudnick, *Director*

**Committee Members**
Carmela Cinquina, *Biology*
Marianne Eleuterio, *Biology*
Michael Moran, *Chemistry*
Kostas Myrsiades, *English*
Leigh Shaffer, *Psychology*
Paul Streveler, *Philosophy*
Ralph Verno, *Mathematics*

The Pre-Medical Program prepares students for application to health professional schools of medicine, dentistry and veterinary medicine. It consists of an individualized selection of course work, personal counseling beginning in the freshman year, and junior-year biomedical research at an outside research institute. The program is supervised by a Pre-Medical Committee in conjunction with outside physicians and dentists who serve as advisors to the program. Students with majors other than Chemistry-Biology* (Pre-Medical) are required to have two advisors — one from their major field and one from the Pre-Medical Committee.

Because of the intense competition for health professional school admission, only academically talented and highly motivated students should apply to the Pre-Medical Program. Applicants are selected on the basis of their potential for achievement in the program. Students in the program must maintain a minimum 3.0 grade point average and the high standards of performance necessary for health professional school admission.

It is essential for incoming students contemplating a medical career to register with the Pre-Medical Office immediately upon matriculation at the University. Similarly, it is essential for students who at some later time develop an interest in a medical career to register with the Pre-Medical Office. Students who fail to consult with the Pre-Medical Office prior to taking the Medical College Admissions Test (MCAT) or who fail to report the results of any MCAT exam to the Pre-Medical Office forfeit the privilege of receiving a Pre-Medical Committee letter of evaluation when they apply to medical school.

All West Chester students who wish to apply to a health professional school should ask their professors to forward letters of evaluation to the Pre-Medical Committee and *should process their applications through the committee.* The committee will send a composite letter of evaluation to the professional school. *Except for special circumstances, no letters of recommendation should be sent directly to professional schools.*

Further information is available in the Pre-Medical Office, Room 161 Schmucker Science Center.

**CONCENTRATION AND CORE REQUIREMENTS FOR PRE-MEDICAL CHEMISTRY-BIOLOGY* (PRE-MEDICAL) CURRICULUM**

**BACHELOR OF SCIENCE — CHEMISTRY-BIOLOGY* (PRE-MEDICAL)**

| | | |
|---|---|---|
| 1. | General Requirements<br>Includes 6 semester hours of English Composition | 29 s.h. |
| 2. | Biology<br>BIO 110, 117, 330, 357, 448, 468 | 24 s.h. |
| 3. | Chemistry<br>CHE 103, 104, 231, 232, 321, 345, 471<br>CRL 103, 104, 232, 345 or 471 | 30 s.h. |
| 4 | Concentration Elective, Biology or Chemistry | 3 s.h. |
| 5. | Mathematics<br>MAT 121, 161, 162<br>CSC 115 or 141 | 14 s.h |
| 6. | Physics<br>PHY 170 or 130<br>PHY 180 or 140 | 8 s.h. |
| 7. | Free Electives | 20 s.h. |

**See also Chemistry.**

# Psychology

Harold R. Sands, *Chairperson*
Edward Pollak, *Assistant Chairperson*

**PROFESSORS:** Clark, Cohen, Crawford, Kumar, Means, Morse, Pollak, J. Porter, Sands, Smith

**ASSOCIATE PROFESSORS:** Duncan, Logan, Moore, L. Porter, Shaffer, Shinehouse, Treadwell

**ADJUNCT PROFESSOR:** Mark

1. The B.A. in PSYCHOLOGY prepares the student to understand those variables, such as heredity, learning, and the environment, which shape and change behavior. Careers are possible in clinics, guidance centers, industry, hospitals, schools, and government. Students should consult their advisors concerning recommended preparations for specific career goals.

2. The B.S. in EDUCATION program prepares students to teach the social sciences in the secondary schools.

**BACHELOR OF ARTS — PSYCHOLOGY**

| | | |
|---|---|---|
| 1. | General Education Requirements, see pages 30-32.<br>Includes PSY 100, MAT 103 is required; BIO 100 is recommended to meet the science requirement. | 47-51 s.h |

2. Foreign Language/Culture Requirement, see pages 31–32. 0-15 s.h.
3. Department Requirements 33 s.h.
   A. Required Psychology Courses (21 s.h.) PSY 245, 246, 400. Students must choose two courses from Group A and two courses from Group B.
      *Group A*
      PSY 354, 357, 375
      *Group B*
      PSY 363, 464, 470
   B. Psychology Electives (15 s.h.)
      These may be selected from among any of the departmental offerings.
4. Department Free Electives 29-48 s.h.
   These electives are in addition to the 9 s.h. of electives listed under the General Education Requirements (see pages 30-32) and may be selected from among any of the University course offerings.

**BACHELOR OF SCIENCE IN EDUCATION**

SOCIAL STUDIES: PSYCHOLOGY (concentration)

See description under Social Studies: B.S. in Education, page 113.

Psychology Requirements (15 s.h.)
PSY 245, 354, 356 or 357, 375, 464

**MINOR IN PSYCHOLOGY**

A total of 18 semester hours is required. Two minors in psychology are offered. One is the Individualized Minor; after taking PSY 100, the student will choose 15 additional hours in consultation with the minor advisor. The second is the Minor in Psychological Services for the student interested in employment in the mental health/human services area. Required courses for this minor are PSY 100, 210, 375, 327, 391, and 441.

**ASSOCIATE OF ARTS IN LIBERAL STUDIES — PSYCHOLOGICAL SERVICES CONCENTRATION**

1. General Educational Requirements, see pages 32-33
2. Departmental Requirements
   A. Required Courses 18 s.h.
      PSY 100, 210, 327, 375, 391, and 441
   B. Free Electives 8 s.h
      These may be selected from among any courses offered by the University.

**ASSOCIATE OF ARTS IN LIBERAL STUDIES — PSYCHOLOGY CONCENTRATION**

1. General Education Requirements, see pages 32-33 38 s.h.
2. Departmental Requirements
   A Required Courses 18 s.h
      Any six psychology courses which are appropriate to the student's interests and vocational plans may be taken under advisement.
   B. Free Electives 8 s.h.
      These may be selected from among any courses offered by the University.

---

**COURSE DESCRIPTIONS**
PSYCHOLOGY
Symbol: PSY

★ **100 Introduction to Psychology (3)** Introduction to the scientific study of behavior The multiple bases of human behavior with emphasis on the learning process. Basic concepts, principles, and methodology. Students may be required to become familiar with an ongoing research study in psychology as an out-of-class assignment. Offered fall, spring and summer.

**210 Developmental Psychology I (3)** A survey of research findings and theoretical issues related to developmental processes from the prenatal phase to senescence. PREREQ: PSY 100. Offered fall and spring.

**245 Research Methods and Statistics I (3)** Experiments on selected problems, with emphasis on techniques in the design and execution of experiments and on the application of elementary techniques to the collection, analysis, and interpretation of data PREREQ. PSY 100. Offered fall and spring.

**246 Research Methods and Statistics II (3)** Continuation of PSY 245 with emphasis on more advanced experimental designs and statistical techniques. RECOMMENDED PREREQ PSY 245 Offered in fall and spring

**265 Industrial Psychology (3)** A basic course for business majors. Emphasis on the theoretical developments in psychology as these relate to the study of people in organizations and industry. Offered fall and spring.

**270 Psychology of Adjustment (3)** Application of principles of psychology to problems of individual adjustment Processes of coping used by normal persons in everyday life. PREREQ. PSY 100.

**325 Psychological Testing and Measurement (3)** Principle of psychological measurement including standardization, scale transformation, reliability, validity, and item-analysis. Use of tests for the solution of problems in industrial business, and educational settings. PREREQ: PSY 100.

**327 Behavior Modification (3)** A survey of the principles and practices employed in inducing behavioral changes in clinic, institution, agency, and school settings. PREREQ PSY 100. Offered spring.

**354 Social Psychology (3)** The study of the ways in which the individual is affected by the actual, imagined or implied presence of others. PREREQ: PSY 100. Offered fall and spring.

**356 Study of Personality (3)** An introduction to the dynamics of personality functioning. Topics such as self-esteem, stress, conflict, frustration, and defense will be explored PREREQ PSY 100. Offered spring.

**357 Theories of Personality (3)** An advanced course in personality which examines the theories and writings of Freud, Jung, Adler, Fromm, Erikson, Rogers, and other major personality theorists PREREQ: PSY 100. Offered fall and summer

**363 Psychology of Learning (1-2: one hour lecture, 2 hours lab)** Basic laws and theories of learning. Selected laboratory experiments with animal and human subjects illustrating fundamentals of learning. RECOMMENDED PREREQ. PSY 245. Offered fall.

**375 Abnormal Psychology (3)** The nature and manifestations of normality and abnormality, mental mechanisms and symptoms, psychoneuroses, psychoses, the psychopathic personality and mental deficiency PREREQ. PSY 100. Junior or senior standing recommended. Offered fall, spring and summer

**390 Principles of Counseling and Psychotherapy (3)** A review of theoretical assumptions underpinning various approaches to counseling and psychotherapy, with particular reference to comparative outcome data. RECOMMENDED PREREQ PSY 356 or PSY 357 and 375 or permission of the instructor. Offered spring.

**391 Psychological Techniques (3)** A survey of a variety of psychological techniques which are applied in the process of observing, diagnosing, and changing problematic human behavior PREREQ PSY 100. Offered fall

**400 Senior Seminar in Psychology (3)** Advanced topics in psychology A written and/or oral presentation describing and analyzing current issues in psychology Required of all psychology majors. Offered fall and spring

**410 Independent Studies in Psychology (1-3)** Special research projects, reports, readings in psychology. Open to seniors only PREREQ permission of department chairperson Offered fall and spring

**430 Human Sexual Behavior (3)** An intensive study of those variables under which human sexual behavior functions Research from sociological and medical studies is integrated with psychological knowledge. PREREQ: PSY 100. Junior or senior standing recommended Offered fall and spring

**435 Animal Behavior (3)** The evolution and adaptiveness of behavior Emphasis on physiological, genetic and learning processes underlying animal behavior PREREQ PSY 100 or permission of instructor

**441 Field Experience in Psychology I (3)** A

★ Approved Distributive Requirement Course

work-study program in an educational or mental health facility under joint supervision of the instructor and the staff psychologist of the field institution. Senior standing and permission of instructor recommended. Offered fall, spring and summer.

**442 Field Experience in Psychology II (3)** Continuation of PSY 441.

**443 Psychology of Group Processes (3)** An exploration of the dynamics of interpersonal behavior in small groups. Theory applied to practice in class. PREREQ: PSY 100; permission of instructor recommended. Offered fall.

**445 Organizational Development (3)** The study of human behavior in task group and organizational contexts. PREREQ: PSY 100. Offered summer.

**447 Human Intimacy (3)** A study of processes and factors in establishing, maintaining, and terminating relationships via the use of group methods. Offered spring.

**450 Motivation (3)** A study of drives, motives, and emotions as determinants of behavior. Physiological and social aspects of motivation will be explored with some attention given to pathological factors. PREREQ: PSY 100. Offered fall in alternating years.

**455 Psychology of Aggression (3)** Survey of the nature and origins of aggression, emphasizing human aggression. Topics include the biological bases of aggression, social-psychological theories of aggression, contemporary social problems related to aggression, and prospects for the reduction of aggression. PREREQ: PSY 100.

**461 Applied Psychology (3)** Basic psychological principles as applied to industry, engineering, and other professions. PREREQ: PSY 100.

**462 History and Systems of Psychology (3)** An integrated overview of the history of psychology as well as the systems, theories and fundamental issues with which psychologists have concerned themselves in the past, recent, and current stages of the science. PREREQ: PSY 100. Offered spring.

**464 Physiological Psychology (3)** Anatomical, endocrinological and physiological processes underlying behavior, including motivation, emotion, learning and memory. PREREQ: PSY 100, BIO 100 or 110 recommended. Offered fall, spring and summer.

**465 Psychology of Women (3)** A study of the behavior and experience of women. Biological cultural, interpersonal and intrapersonal determinants of women's actions, thoughts and feelings will be explored. PREREQ: PSY 100. Offered fall and spring.

**470 Sensory and Perceptual Processes (3)** Theory, data, and methodology of sensory and perceptual processes. PREREQ: PSY 100.

**475 Cognitive Psychology (3)** Basic research and application in memory and information processing. PREREQ: PSY 100.

**482 Developmental Psychology II — Infancy and Childhood (3)** An advanced study of the normal child from conception to puberty. Emphasis on current theoretical issues involved in the effects of early experience and environment. PREREQ: PSY 100.

**483 Developmental Psychology III — Adolescence (3)** An advanced study of the psychological development of the young person from puberty to adulthood, emphasizing the developmental problems of reaching maturity. PREREQ: PSY 100.

**484 Developmental Psychology IV — Adulthood and Aging (3)** An advanced study of psychological development during the mature years and senescence. PREREQ: PSY 100.

**490 Topical Seminar in Psychology (1-3)** Special topics in psychology not covered under existing regularly offered courses. Offered fall or spring. PREREQ: PSY 100.

# Russian Studies

Frederick Patton, *Coordinator*

Offered jointly by the Faculty of Arts and Sciences and the Faculty of Professional Studies.

Any student in the University, regardless of his or her area of specialization, may earn a minor specialization in Russian Studies after satisfactory completion of 18 semester hours of work, distributed as follows:

| RUSSIAN STUDIES | 18 semester hours |
|---|---|
| Required: Either A or B | |
| A. 1. Russian Language (Intermediate level or above) | 6 s.h. |
| 2. Russian History and/or Politics | 6 s.h. |
| OR | |
| B. 1. Russian History and/or Politics | 6 s.h. |
| 2. Russian Civilization and Culture | 6 s.h. |
| Electives: | 6 s.h. |

As advised, from Russian-oriented courses offered by the Departments of Government and Planning, Anthropology and Sociology, English, Art or other departments of WCU. In track A, one three (3) credit course must be devoted to literature, art, history, or music.

For advising, see Professor Patton in the Department of Foreign Languages.

A student should maintain a 3.0 average in area-studies courses to be recommended for graduate work in the area studies-concentration.

**Russian Studies Courses**

Russian Culture (Soviet period) (RUS 209)
Russian Art (ARH 405)
The Soviet Union (GEO 304)
Russia to 1917 (HIS 324)
Soviet Russia (HIS 425)
Soviet Politics (PSC 246)
Soviet and East European Literature (CLS 363)
Contemporary Film (Russian and Eastern European) (FLM 302)
Russian Literature in Translation (RUS 310)
All Russian Language courses numbered 201-412 (RUS)

# Social Studies

David S. Eldredge, *Coordinator*

### BACHELOR OF SCIENCE IN EDUCATION — COMPREHENSIVE SOCIAL STUDIES

The Commonwealth of Pennsylvania grants a comprehensive social studies certificate entitling the holder to teach any of the social studies in public school. Preparation combines an introduction to all of the social science disciplines with either a concentration in one discipline, or an interdisciplinary concentration. For information, and specific course requirements, contact the chairpersons of the departments participating in this program, or Mr. Eldredge, Department of Government and Planning.

### COMMON REQUIREMENTS

1. General Requirements, see pages 30-32 — 51 s.h.
2. Professional Education, see page 60 — 30 s.h.
3. Social Science Requirements: HIS 101, 102, 151 and 152; ANT 102; ECO 101 or 131 and 132; GEO 101; PSC 100; PSY 100; SOC 200; plus 6-9 s.h. and a concentration.

A 2.5 cumulative average in the social sciences and a 2.25 overall average is a prerequisite for student teaching.

A. Concentration in a Social Science Discipline

Twenty-one (21) s.h. in the discipline of student's choice, provided that the academic department is participating in the B.S.Ed program. At this time, students may choose from anthropology, geography, history, philosophy, political science, psychology or sociology. See department of concentration for advising.

B. Concentration in American Culture. See History Department for advising.

| | |
|---|---|
| American Studies Core | 24 s.h. |
| American Studies Electives and Social Science | 9 s.h. |
| Requirements | 9 s.h. |

C. Concentration in World Cultures. Consult with any of the following departments for advising: Anthropology and Sociology, Government and Planning, or History.

| | |
|---|---|
| Seminar | 3 s.h. |
| European Tradition | 9 s.h. |
| Non-European Tradiuon | 9 s.h. |
| Topical and Thematic Approaches | 9 s.h. |

D. Concentration in Ethnic Studies, Advised by Department of History

| | |
|---|---|
| History Courses | 15 s.h. |
| Social Science Electives and Requirements | 9 s.h. |
| Humanities Electives | 6 s.h. |
| Teaching in Urban Schools (EDU 361) | 3 s.h. |

### COURSE DESCRIPTIONS

COMPREHENSIVE SOCIAL STUDIES

**SSC 331 Teaching Social Studies in Secondary Schools (3)** Methods and materials of teaching social studies for prospective secondary school teachers. Emphasis is on combining educational theory with social studies content for effective teaching. Exercises and practical application.

# Social Work

Mildred C Joyner, *Chairperson*
**ASSOCIATE PROFESSORS:** Bartlett, Main
**ASSISTANT PROFESSORS:** Hodgins, Joyner, McCutcheon

The Social Work Program combines a liberal arts foundation with the analytical framework of the social and behavioral sciences and the principles and methods associated with the professional practice of social work. The student applies theory to practice in the varied field experiences of the sophomore, junior, and senior years. The ultimate goal of this program is to have the student develop a basic competency in generic social work practice.

The Social Work Program is accredited as a professional degree in social work by the Council on Social Work Education.

Students interested in majoring in social work should take Introduction to Social Welfare I & II (SWO 200 and SWO 220) during the fall and spring semesters of their freshman year. Students are required to maintain a 2.0 cumulative average in general education requirement courses, a 2.5 average in social science cognate courses, and a 3.0 average in all social work courses for continuance in the social work program. Students are also expected to demonstrate attitudes and behavior consistent with the values and ethics of professional social work and the social work code of ethics.

### TRANSFER STUDENTS FROM OTHER COLLEGES OR UNIVERSITIES

Students transferring from other colleges or universities as sophomores or juniors must make an appointment with an appropriate faculty member of the Department of Social Work to discuss their status in regard to admission to the program.

### SOCIAL WORK FIELD PLACEMENTS

Juvenile Court of Delaware County
Brandywine Hospital
Women's Alternatives
Chester County Board of Assistance
Chester County Children's Services
Crozer Chester Medical Center
Delaware County Children & Youth
Delaware County Intermediate Unit
Help Counseling Drug & Alcohol Program
Family Service-Mental Health Centers of Chester County
United Cerebral Palsy of Chester County
Travelers Aid Society
West Chester Public Schools

### BACHELOR OF ARTS — SOCIAL WORK

| | |
|---|---|
| 1. General Requirements, see pages 30-32 | 51 s.h. |
| 2. Foreign Language Requirements (second half of the intermediate year) | 3 s.h. |
| 3. Social Science Cognates | 9 s.h. |
| 4. Social Work Concentration<br>SWO 200, 201, 300, 320-321, 350-351, 375, 420, 431, 432, 450-451, 459-496 | 51 s.h. |
| 5. Cognates (Psycho-Social Foundation)<br>Select four courses, under advisement. | 12 s.h. |
| 6. Electives | 3 s.h. |

Social work majors should choose with their advisor an interdisciplinary elective geared to their learning needs and professional interests.

### MINOR IN SOCIAL WORK

A minor in social work offers students (1) an understanding of the purposefulness of human behavior, (2) a professional method with which to deal effectively with that behavior, and (3) knowledge of the varied fields of practice of social work and how they relate to the student's chosen major field. In some instances a collaborative field internship with the student's major discipline will be designed.

Students take SWO 201, 320, 321, 350, 351 and an elective social work course with advisement. Total required hours: 18.

---

### COURSE DESCRIPTIONS

SOCIAL WORK
Symbol: SWO

### PRIMARILY FOR FRESHMEN AND SOPHOMORES

**200 Introduction to Social Welfare I (3)** Current social problems and the influence of societal values upon their definition and upon the structures devised to meet them. Two hours per week of volunteer experience in a social agency. Fall

**201 Introduction to Social Welfare II (3)** The history of social welfare in the United States, and an overview of major fields of social work practice with emphasis upon legislation and policy formulation. Spring.

**220 The Development of A Professional Self (3)** Students are provided background knowledge and skills to function professionally in society. The course adopts the psychological perspective that links self concept and its development with group behavior, the function of social reality, and social role.

**225 Race Relations (3)** Emphasis is placed on racial awareness by examining racial, ethnic, and cultural differences of minority groups in the United States.

### B.A. COURSES FOR SOCIAL WORK MAJORS AND OTHER UPPERCLASSMEN

**300 Social Welfare Systems I (3)** Introduction to selected items in systems analysis, emphasizing application to understanding family systems and the organizational framework of human behavior. Fall

**320 Principles and Methods of Social Work Practice I (3)** A systems approach to the use of generic principles and methods of social work practice. Fall.

**321 Principles and Methods of Social Work Practice II (3)** A continuation of SWO 320. Spring

**350 Psycho-Social Foundations of Human Behavior I (3)** Examination of life stages of early childhood through adolescence. Fall.

**351 Psycho-Social Foundations of Human Behavior II (3)** Continuation of SWO 350. Focus on middle adulthood to aging. Spring.

**375 Field Placement (3)** Junior year field experience for the social work major. Spring.

**420 Social Problems and Practice.** A practice seminar designed to relate to the student's field placement.

**421 Mental Health and Social Work Practice (3)** The scope of mental health services and specific practice skills for social work with mentally disturbed or retarded clients.

**422 Social Work and the Law (3)** A study of legislation and case law affecting social welfare programs for the development of an understanding of legal reasoning and key areas of legal knowledge.

**423 Special Skills in Child Protective Services (3)** Emphasis is placed on understanding child abuse and neglect, assessment of persons in crises, and treatment for the abused and neglected child in today's society.

**431 Methods of Social Inquiry (3)** Fundamentals of problem identification, research design, sampling, observation, data collection and reduction, and non-statistical analysis. Spring.

**432 Social Legislation (3)** A theoretical framework for the analysis, formulation, implementation, and change of social policy, governmental guidelines, and social legislation.

### COURSES FOR SOCIAL WORK MAJORS ONLY

**410 Independent Studies in Social Work (1-3)** Special research projects or practices in social work. Juniors and seniors only. PREREQ. permission of department chairperson. Fall, spring, summer

**450-451 Field Experience I-II (6) (6)** Supervised work experience in social agency. Seniors only. Fall, spring.

**495 Senior Seminar in Social Work (3)** Integration of field and classroom experiences into a professional framework for the social work helping process. Fall.

**496 Social Work Process Seminar (3)** Seminar on social work process designed to relate to the second semester field experience. Spring.

### ADVANCED UNDERGRADUATE AND GRADUATE COURSE

**520 Theory for Social Work Practice (3)**

## Sociology — See Anthropology and Sociology

# Special Education

Deborah A. Nickles, *Chairperson*
**PROFESSOR:** Freeman
**ASSOCIATE PROFESSOR:** Zlotowski
**ASSISTANT PROFESSORS:** Finkel, LaCoste, Nickles

**Degree Program to teach the Mentally and/or Physically Handicapped.**

The object of the program in special education is to provide relevant and comprehensive training for those seeking certification in the teaching of the mentally and physically handicapped.

The special education curriculum is designed to produce a teacher who is clinically oriented with a foundation in normal growth and development and educational practices. The person will have been exposed to children between the ages of 3 to 21 with mental and physical handicapping conditions ranging from mild to severe but is not necessarily equally proficient in all areas. Personal characteristics essential for adequate preparation and performance will include a minimal level of flexibility, receptivity, intellectual ability, physical stamina, and a focus on professional and realistic expectations.

BACHELOR OF SCIENCE IN EDUCATION — SPECIAL EDUCATION

| | |
|---|---|
| 1. General Requirements, see pages 30-32<br>Introduction to Psychology is required. Electives selected under advisement (See Handbook) | 51 s.h. |
| 2. Professional Education<br>Required: EDF 100, EDP 250, EDM 300, EDP 351, EDX 306, or EDE 200, Student Teaching. | 27 s.h. |
| *3. Special Education<br>Required: EDA 101, EDA 102, EDA 220, EDA 301, EDA 302, EDA 350, EDA 360, EDA 403. | 24 s.h. |
| *4. Required Supporting Courses<br>PED 252, EDE 251, EDP 249, EDE 315, EDR 323, EDE 330, SPP 340, MAT 357. | 24 s.h. |

### Minor Program of Study: Developmental Disabilities

Current trends, enforced by recent litigation, have increased the need for a general understanding of the handicapped individual in our culture. This program permits students preparing to enter professions with high probability of contact with exceptional individuals the opportunity to broaden their training in a manner currently not available.

The program is designed to introduce students to exceptionalities through course work and field practicums. A life programming approach is used.

MINOR: DEVELOPMENT DISABILITIES

| | |
|---|---|
| 1. Developmental Disabilities<br>Required: EDA 241, 220, 301 or EDA 302, 350, 403 | 18 s.h. |
| 2. Free Elective<br>Selected with approval of special education advisor. | 3 s.h. |

*Minimum grade of C− required in these courses.

COURSE DESCRIPTIONS
SPECIAL EDUCATION
Symbol: EDA

**100 Mainstreaming for Exceptional Students (1)** This course is designed to acquaint the classroom teacher with the prospective exceptional students who may be spending some portion of the day in the regular setting. Current regulations covering those placements will be reviewed. Emphasis will be placed on adequately meeting special educational needs.

**101 Psychology of the Mentally Handicapped (3)** An introduction to the range of exceptional children from an historical perspective with an in-depth study of mental retardation and emotional disturbance. PREREQ: PSY 100.

**102 Psychology of the Physically Handicapped (3)** An in-depth study of the physically handicapped and the learning disabled/brain damaged with an overview of psychological and societal implications and multi-handicapping conditions. PREREQ: PSY 100.

**220 Behavior Management (3)** An exploration of current practices in management of behavior with emphasis on teacher delivered systems. PREREQ: EDA 101 or 102. Offered Fall only.

**241 Psychology of Exceptional Children (3)** Psychology of children who are mentally gifted or retarded or who have vision, hearing, speech, or orthopedic handicaps or emotional or social problems. PREREQ: PSY 100.

**245 Introduction to Learning Disabilities (3)** Identification, education, and treatment of the child labeled as "learning disabled." Emphasis given to the specific learning and emotional needs such a child presents. An overview of the historical development and current status of this field is included.

**280 Integrating the Arts (3)** Fine art, music, puppetry, and dance are combined as creative processes to be adapted for use with children.

**301 Field Experience and Seminar: Mentally Handicapped (3)** A weekly 3 hour practicum and 1½ hour seminar devoted to field experience with mentally handicapped students and class analysis of observed needs and methods of teacher responses. PREREQ: EDA 101.

**302 Field Experience and Seminar: Physically Handicapped (3)** A weekly 3 hour practicum and 1½ hour seminar devoted to field experience with physically handicapped students and class analysis of observed needs and adjustment factors. PREREQ: EDA 102.

**330 The Academically Superior Child (3)** The gifted child and means of providing an effective educational program for him or her.

**350 Life Curriculum and Methods: Handicapped Learners (3)** Preparation to assist handicapped students to achieve adaptive levels of behavior through the view of total life preparation. PREREQ: EDA 101, 102.

**360 Diagnostic and Prescriptive Teaching (3)** An introduction to diagnostic procedures and the conversion of these findings into relevant educational plans and instructional strategies. PREREQ: EDA 350.

**403 Senior Seminar: Current Trends (3)** Exploration of emerging concepts, problems, and trends in a seminar format with emphasis on individual preparation. PREREQ: EDA 360.

**410 Independent Study (1-3)** Special topics or projects initiated by the student that will enable her/him to do extensive and intensive study in an

area of special education which will sharply increase her/his knowledge of special education PREREQ. permission of chairperson

**416 Student Teaching and Direction of Activities Including Practicum: Emotionally Disturbed (6)** Participation in teaching and all other activities within the student teaching role related to the teacher's work. PREREQ. 96 semester hours including all professional education courses and all specialized preparation courses with standards as shown above (*)

**417 Student Teaching and Direction of Activities Including Practicum: Learning Disabled (6)** See EDA 416 for description and requirements.

**418 Student Teaching and Direction of Activities, Including Practicum: Mentally Retarded (6)** See EDA 416 for description and requirements

**419 Student Teaching and Direction of Activities, Including Practicum: Physically Handicapped (6)** See EDA 416 for description and requirements.

**443 Psychology of the Mentally Retarded (3)** Etiology, diagnosis, and various treatment approaches to the mentally retarded. PREREQ: EDA 241.

**450 Mental Health/Mental Retardation Practicum (3)** Provides opportunity to engage in field work in the mental health/mental retardation field Field and class work adapted to individual interests

# Speech Communication and Theatre

Dennis R. Klinzing, *Chairperson*

**PROFESSORS:** Casagrande, Klinzing, Morehouse

**ASSOCIATE PROFESSORS:** Berkowitz, Hashimoto-Sinclair, Keefe, Meiswinkel, Orr

**ASSISTANT PROFESSORS:** Bytnar, Foeman, Grice, Hall, McCullough, Merritt, Reed

**INSTRUCTORS:** McCoach, Pressley, Saddoris

The Department of Speech Communication and Theatre offers two programs leading to the Bachelor of Arts degree and one program leading to the Bachelor of Science in Education.

1. The B.A. in SPEECH COMMUNICATION focuses on oral communication as the core of a liberal eduction which can be applied to a number of areas of specialization
2. The B.A in THEATRE provides students with opportunities to use performing arts to gain a liberal education and to develop their talents and skills in theatre.
3. The B.S. in EDUCATION — COMMUNICATION is for students who wish to meet the state of Pennsylvania requirements for teacher certification in communication.

Majors are expected to meet with their advisors to plan a course of study, to select courses prior to scheduling, to discuss career opportunities and to keep abreast of departmental co-curricular activities. Handbooks are provided to help students to be aware of requirements for each program in the department. Students who wish to transfer into the B.A. Speech Communication program must have a 2.5 G.P.A. or better.

## DEPARTMENT RELATED STUDENT ACTIVITIES

University Theatre, The Forensic Society and the Communication Club are student organizations which involve department faculty and resources. The activities of these organizations are open to all students. For more information see: STUDENT AFFAIRS.

## DEPARTMENT INTERNSHIPS AND PROFESSIONAL APPRENTICESHIPS

Internship experiences are available in all areas related to students' vocational and academic interests. Students have been placed in offices of congressmen, radio and television stations, theatres, and local industries. Students and their placements are screened to assure mutual satisfaction for all parties involved. For details, students should check with the department's internship coordinator.

## REQUIREMENTS COMMON TO THE B.A. AND B.S. PROGRAMS

General Education Requirements, see pages 30-32 — 51 s.h.

## BACHELOR OF ARTS — SPEECH COMMUNICATION

1. Required Core Courses (C grade or better) — 36 s.h.
   SPC 103 or THA 101, SPC 117, SPC 201, SPC 204, SPC 208, SPC 216, SPC 308, SPC 350, SPC 403, SPC 405, SPC 415, Eng Comp as advised
2. Foreign Language/Culture Requirement, see pages 31-32 — 0-15 s.h.
3. Applied Area — 27-42 s.h.
   Courses are to be selected in consultation with an advisor to meet career objectives.

## BACHELOR OF ARTS — THEATRE

1. Required Core Courses for all areas — 19 s.h.
   THA 100 (4 s.h.), THA 101 (assigned to General Education Arts requirement), THA 102, THA 103, THA 104, THA 210, THA 301
2. Additional Core Courses for All Except Musical Theatre Area — 15 s.h.
   THA 215 or 216, select two from THA 306, 307, 308, LIT 335 or 336 and LIT 305
3. Foreign Language/Culture Requirement, see pages 31-32 — 0-15 s.h.
4. Applied Areas or Concentrations
   a. Musical Theatre Concentration — 46-48 s.h.
   b. Acting Concentration — 30-37 s.h.
   c. Technical Production Concentration — 30-37 s.h.
   d. Directing Concentration — 30-37 s.h.

## BACHELOR OF SCIENCE IN EDUCATION — COMMUNICATION

1. Core Requirements — 30 s.h.
   SPC 208, SPC 308, SPC 415, LIT 200 or 201, LIT 230 or 231, LIT 202 or 203, ENG 230, ENG 331, ENG 335 or 339, ENG 201

2. Emphasis Area Requirements. Choose two areas. 30 s.h.
   a. Speech Requirements (15 s.h.)
   THA 102, SPC 103, SPC 216, SPC 350, SPC 405. Participation in forensics activities is required.
   b. Theatre Requirements (15 s.h.)
   THA 103, THA 104, THA 210, THA 301, THA 306 or 307 or 308, THA 101 (to be taken as a General Education Arts requirement). Participation in theatre productions is required.
   c. Media Requirements (15 s.h.)
   JRN 200, SPC 117, SPC 202, SPC 220, SPC 217 or 317

3. Professional Education Requirements 30 s.h.
   EDF 100, EDP 250, EDM 300, EDS 306, EDP 351, EDS 412, SPC 402

MINOR PROGRAMS

1. **Speech Communication Minor** 18 s.h.
   SPC 103 or THA 101, SPC 204, SPC 208, SPC 117, SPC 308, SPC 216
2. **Theatre Minor** 18 s.h.
   THA 101, THA 103, THA 215 or 216, THA 210, THA 104, THA 301

## COURSE DESCRIPTIONS

### SPEECH COMMUNICATION

Symbol: SPC

**101 Speech Fundamentals: Interpersonal Communication (3)** Development of competencies for purposeful speech communication. Awareness of the effects of language on communications. Recognition of the types and purposes of a selected number of communications. Grasp of the role of evidence and organization in spoken messages.

**102 (Also THA 102) Oral Interpretation (3)** See THA 102 for description.

**103 Introduction to Rhetorical Heritage (3)** The development of critical communication variables evolved from early Sophistic Greece through modern Empiricism.

**105 Voice Dynamics (3)** Training in the creative-esthetic production of speech; includes respiration, phonation, articulation and resonation

**106 (also SPP 106) Introduction to Phonetics (3)** See SPP 106 for description.

**117 Introduction to Radio-TV-Film (3)** A survey course designed to identify, analyze, and evaluate the pragmatic, persuasive, creative, and technical dimensions of mass media.

**200 Communication Careers Planning I (1)** This course is designed to introduce the first of a two phase career planning process. Self-assessment and exploration is provided through assigned readings, mini-lectures, reflective exercises and small group activities.

**201 Communication Research Concepts (3)** Exploration of basic concepts, terminology, methods, and procedures involved in various forms of communication research Emphasis is placed on equipping students with the knowledge and skills needed to read and comprehend journal articles in speech communication and allied fields

**202 Scripts and Formats for Mass Media (3)** Students are required to analyze, evaluate, and produce scripts for a variety of mass media formats. The course emphasis is on radio, television and film.

**204 Dyadic Communication (3)** One on one communication to give the student a basic understanding of the processes and experiences of the most basic type of human communication

**208 Public Communication (3)** Development of skills necessary to understand the theory of communication as a problem-solving tool in the community Special emphasis is on the student's performance as a sender and receiver of messages directed at social action

**210 Photo Communication I (3)** A basic course in the use of creative techniques available to the beginning photographer for the production of quality slides.

**216 Small Group Communication (3)** Introduction to and practice in the structured small group. Emphasis on preparation for, analysis of, and participation in problem-solving oriented groups.

**217 Directing and Producing the Documentary Television Programs (3)** Planning and producing the non-dramatic television production

**220 Multi-Media Communication (3)** The practical application of communication theory through experiences in photography and multi-media productions. The creative potentials of combining sound and various photographic elements will be explored with special attention given to photo journalism as used in advertising, public relations, theatre and related mass communication studies.

**221 Photo Communication II (3)** This course will give the student a chance to develop a personal photographic communication style. The student will be encouraged to explore and express his/her personal perceptions through photography.

**230 Business and Professional Speech Communication (3)** Practice in effective speaking and listening; reports and sales presentation, policy speeches, conference leadership techniques, group dynamics, speaking; interpersonal communication in the business and professional setting.

**300 Communication Careers Planning II (1)** This second phase of the careers planning course series examines the initial steps required for finding employment. Topics covered include the job hunt process, resume development, networking, and the transition from college to employment

**303 Modern Trends in Argument (3)** Study of the new thinking in argumentation theory. De-emphasizes classic validity and centers on the building of arguments which are acceptable to the hearers Course focuses on the work of Stephen Toulmin and Chaim Perelman.

**308 Communication Theory (3)** Examines the theoretical and practical implications of basic interpersonal and mass communication theories.

**309 Advanced Public Speaking (3)** Designing personal strategies, adapting delivery to large audiences, developing oral use of language and speaking to live or simulated community groups.

**310 Field Experience in Photographic Communication (3)** This course in slide photography will build on the students' previous experiences in photography. The student will develop the technical, visual and photo communication skills necessary to explore, record and interpret his/her surroundings through photographic essays and related photo communication projects. These skills will be achieved through field experiences and classroom instruction.

**315 Structure of Meetings (3)** This course prepares students to plan formal agendae, write/interpret organizational by-laws and constitutions, and participate in/preside over meetings according to parliamentary practice.

**316 Discussion: Non-Structured Group (3)** A modified training group in which the group members are the focus of all interaction.

**317 Directing and Producing the Dramatic Television Program (3)** Planning the program. Preparing the shooting script. Practice in rehearsing with actors and cameras.

**318 Forensics (3)** Study in the philosophy and practice of forensics. Initiating, developing, and administrating a forensic program. Coaching and judging debate and individual events

**320 Communicating on Television and Radio (3)** For the student who, by career or circumstance, will be required to be on radio and television. The focus of the course will be on three major areas: interviewer/interviewee techniques; acting for television, including working in commercials; and news reporting, including studio and remote locations. PREREQ: THA 103.

**350 Nonverbal Communication (3)** A study of the verbal and sensory messages we are constantly receiving Body language and the uses of space, time, touch, objects and color inherent in the sensory messages we receive.

**399 Directed Studies in Speech Communication (1-3)** Research, creative projects, reports, reading in speech communication. Application must be made to advisors by students one semester in advance of registration. PREREQ: approval of department chairperson. Open to juniors and seniors only.

**400 Internship in Speech Communication (3-6-9-12-15)** This course provides a structured and supervised work experience in communication. Credits earned are based on amount of time spent on the job. Students must apply to the department internship coordinator and receive approval of the department internship faculty committee to be admitted.

**401 Organizational Communication (3)** An indepth analysis of the dynamic process of communication as it occurs within organizational networks.

**402 Teaching Communications (3)** Theory and

practice in teaching junior and senior high school communication and drama courses and in directing co-curricular programs in junior and senior high school.

**403 Persuasion (3)** Current theories of attitude and attitude change. Practice in speaking to modify behavior through appeals to the drives and motives of the listener PREREQ. SPC 101 or consent of instructor.

**405 Argumentation and Debate (3)** Functions and principles of argumentation and debate, including analysis, evidence, reasoning and refutation Class debating on vital issues

**409 Intercultural Communication (3)** A study into factors which contribute to communication breakdowns between diverse cultures and between fragmented segments within the same society.

**415 (also LIN 415) General Semantics (3)** Study of the relativistic view of language developed by Alfred Korzybski Emphasis on language manipulation; its effect on individual behavior, and its place in interpersonal communication

**499 Communication Seminar (3)** Intensive examination of a selected area of study in the field of speech communication. Topics will be announced in advance.

## COURSE DESCRIPTIONS

### THEATRE

Symbol: THA

**100 Theatre Practice (1-3)** Laboratory experience in technical aspects of play production. Open to all students.

**101 Introduction to Theatre (3)** Survey of theatre as a humanity by exploring development and use of forms, styles, and elements of drama The study includes historical periods, musicals and Black Theatre.

**102 (also SPC 102) Oral Interpretation I (3)** Theory and practice of oral presentation of various types of literature to an audience.

**103 Beginning Acting (3)** Theory and practice in creating the character through development of the actor's physical and emotional responses. No previous experience is necessary and the course is open to non-majors

**104 Stagecraft (3)** Planning, construction, painting, rigging, and shifting of scenery Management of all operations backstage. Laboratory required

**113 Stage Movement (3)** An introduction to movement for the undergraduate actor to include actor-body emphasis, concentration exercises, character development, nonverbal communication, and integration of voice and body.

**202 Oral Interpretation II (3)** Advanced work in oral presentation of literature with emphasis on the theory and technique of readers theatre. PREREQ: THA 102.

**203 Intermediate Acting (3)** Theory and practice in developing actor's skills; bodily movement, character interpretation, concentration, etc. PREREQ: THA 103.

**207 Children's Theatre (3)** Production of children's theatre for stage and television Course elements will include script analysis and production values, publicity and tour preparation. Students enrolled in the course will create a complete production.

**209 Creative Dramatics (3)** Theory and practice in creative techniques of expression and dramatic forms to be used as a teaching and recreational device for children and adults.

**210 Stage Makeup (3)** Theory and practice in design and application of makeup for the stage.

**215 Costume I: Greek to 16th Century (3)** The history of European costume from Greek to Elizabethan. Students are required to design costumes for periods studied. Laboratory required

**216 Costume II: 16th Century to Present (3)** The history of European and American costume from the 16th century to present day Students are required to design costumes for each of the periods studied THA 215 is not a prerequisite. Laboratory required

**301 Directing (3)** Theory and practice in play direction with emphasis on play selection, script preparation, casting, blocking, and rehearsing. PREREQ: THA 103 and THA 104 or permission of the instructor.

**302 Technical Direction (3)** The organization and management of a theatre scene shop is presented in this course. Topics covered include drafting, budgeting and constructing scenery. Laboratory required

**303 Advanced Acting (3)** Improvisation, modern and period acting styles. Acting projects presented and defended before an invited audience. One hour of lab. PREREQ: THA 203.

**304 Scenic and Lighting Design (3)** Principles and practices in designing of appropriate and expressive milieu for the play. Perspective sketches, working drawings, lighting plots and models Historical development of stage scenery and lighting.

**305 Stage Management (3)** This is a course which trains people to work as stage managers for theatre and dance productions. Basic techniques and management competencies are developed

**306 History of Theatre: Greek to 16th Century (3)** Development of the theatre from primitive times to the English Renaissance.

**307 History of Theatre: French Renaissance to Romantic (3)** Development of theatre from Shakespeare to 19th century.

**308 History of Theatre: Romantic to Present (3)** The history of theatre in the 19th and 20th centuries is covered. Western theatre, but especially theatre in the United States, is presented

**309 Aesthetics of Asian Theatre (3)** Asian integration of form and content, especially in the theatres of India, China, and Japan

**310 Advanced Makeup (3)** Theory, development, and application of theatrical makeup according to the play, its period, the style of production, the actor, and the character Students must have previous knowledge of the basic two and three dimensional makeup devices. PREREQ: THA 210.

**311 Women in Theatre (3)** If theatre mirrors the times, there must be some reason for the preponderance of neurotic and domineering women found in dramatic literature. This course will explore the psychological and sociological reasons for this character in modern times.

**399 Directed Studies in Theatre (1-3)** Research, creative projects, reports, readings in theatre. Application must be made to advisors by students one semester in advance of registration PREREQ. THA 101, 102, 103, and 104, or permission of instructor.

**400 Professional Apprenticeship (3-6-9-12-15)** This course provides a structured and supervised work experience in theatre Students must apply to the director of theatre for permission to enroll

**401 Advanced Directing (3)** Directing as a creative aspect of play production Problems in directing, actors in various styles and forms of plays. PREREQ: THA 301

**402 Musical Theatre Directing (3)** This course presents advanced theories and techniques required for directing. American music theatre. PREREQ: THA 301.

**404 Advanced Scenic and Lighting Design (3)** Analysis of excellent scene designs of the past Practice in maximizing the visual impact of stage scenery and lighting. Design projects for selected visually challenging plays. Students design for both student-directed and major productions on campus. One hour of lab. PREREQ: THA 304

**405 Advanced Costume Design and Construction (3)** This course emphasizes the unrealistic and styled approaches for costume design and construction PREREQ: THA 215 or THA 216 and/or permission of instructor.

# Teaching Certification Programs

West Chester University offers 22 undergraduate certification programs and two endorsement areas for students who wish to prepare themselves to be certified teachers. These programs, which are described more fully in the departmental listings, include:

| Department | Program and Degree |
|---|---|
| Anthropology-Sociology | BSED: Social Studies — Anthropology |
| | Social Studies — Sociology |
| Biology | BSED: Biology |
| Chemistry | BSED: Chemistry |
| Childhood Studies and Reading | BSED: Elementary Education |
| | Early Childhood Education |
| Communicative Disorders | BSED: Speech Correction |
| English | BSED: English |
| Foreign Languages | BSED: French |
| | German |
| | Latin |
| | Russian |
| | Spanish |
| Geology and Astronomy | BSED: General Science |
| | Earth-Space Science |
| Government and Planning | BSED: Social Studies — |
| | Geography |
| | Political Science |
| Health | BS: Health Education |
| | BS: Dental Hygiene |
| History | BSED: Social Studies — |
| | History |
| | American Cultures |
| | Ethnic Studies |
| | Human Heritages |
| | World Cultures |
| Mathematical Sciences | BSED: Mathematics |
| Music Education | BS Music Education: Vocal, Choral, General, Instrumental |
| Philosophy | BSED: Social Studies — Philosophy |
| Physical Education | BS Health and Physical Education |
| | Endorsement Certification: Driver Education |
| Physics | BSED: Physics |
| Psychology | BSED: Social Studies— Psychology |
| Special Education | BSED: Special Education |
| Speech Communications and Theatre | BSED: Communications |

## ADMISSION TO TEACHER EDUCATION

All candidates for teacher certification must meet the teacher education requirements as well as satisfy the requirements of their respective departments. The following teacher education requirements must be satisfied prior to student teaching:

1. Maintain a cumulative G.P.A. of 2.5;
2. Maintain an overall G.P.A. of 2.25 for the following required courses: EDF 100, EDP 250, ENG 120 (if required), ENG 121, 3 credits of MAT 103 (or course required by major department), PSY 100;
3. Demonstrate writing competency by completing ENG 121;
4. Completion of a speech screening test and hearing screening test;
5. Successfully pass a reading screening test;
6. Demonstrate computer literacy competencies by:
   a. Successfully completing a computer literacy course (may be part of general education science distribution requirement) or
   b. Passing a computer literacy test administered by the Mathematical Sciences Department;
7. Provide evidence of 30 clock hours of field experiences by maintaining a portfolio on file in the student's major department. Such evidence must meet the standards of the specific certification program.

## STUDENT TEACHING

Student teaching is to be taken in the seventh or eighth semester and normally culminates the professional experience in pre-service preparation for teaching. Students are required to file applications for student teaching with their individual departments. Since each department's regulations differ, students are urged to check with departments so the proper procedure may be followed.

Students must do their teaching in stations in school areas where the University holds a contract for student teachers.

To be eligible for student teaching, candidates must have senior standing (96 semester hours) and a cumulative index of 2.5 or higher and should have completed all course work required in at least the first six semesters and satisfied the requirements for full admission to teacher education. Criteria for student teaching approval occasionally change. Students should contact departments for requirements. A student receiving a C, D or lower grade in student teaching will be denied certification.

## NATIONAL TEACHER EXAMINATION

The University provides an annual opportunity for students to take the National Teacher Examination. Details are available from the Career Development Center.

## TEACHING CERTIFICATES

It is the student's responsibility to apply for a Pennsylvania Certificate through the institution's certification office. It is recommended that students apply as soon as requirements have been met. Applicants for certification must meet the requirements in effect at the time of application.

Applicants for the certificate generally must be citizens of the United States. A non-citizen must have an immigrant visa and have declared the intent to become a citizen of the United States.

Beginning June 1, 1987 each person who applies for a Pennsylvania Instructional Level I Certificate must first pass the

Pennsylvania Teacher Certification Competency Tests in the following areas: Basic skills including writing, reading, and mathematics; General knowledge, including social sciences, literature and fine arts, and science; Professional knowledge; and Major subject specialization area. It is recommended that the student take the basic skills and general education tests at the end of the sophomore year or whenever the University's General Education Requirements have been completed. The professional knowledge and major specialization area tests should be taken near the end of the senior year after all requirements have been completed. West Chester University has been designated as a test center. Tests will be administered four times a year.

Application forms and information about certification are available from the Certification Office in the School of Education.

### INSTRUCTIONAL I CERTIFICATE

A student who completes one of the University's teacher education curricula receives his or her degree from the University and may qualify for an Instructional I Certificate, which is issued by the Pennsylvania Department of Education. This certificate is valid for six years of teaching in Pennsylvania. Recommendation for the certificate is made by the certifying officer of the University.

### INSTRUCTIONAL II CERTIFICATE

This certificate requires three years of successful teaching in Pennsylvania under the Instructional I Certificate and the satisfactory completion of 24 semester hours of additional work of collegiate grade, completed after issuance of the baccalaureate degree from a four-year degree granting institution — not a community or junior college. This certificate is a permanent license to teach in Pennsylvania.

All or part of the educational requirements for this credential may be obtained through approved in-service programs.

Additional subject areas may be obtained by completing requirements for that area. Consult the department in which you seek certification for information and an evaluation of your credits.

Post-baccalaureate students who wish to obtain teaching certification should consult with the School of Education.

# Undeclared Major Program

Theodore H Butcher, *Director, Academic Advising Center*

**FACULTY ACADEMIC ADVISORS:** Butcher, Schuette

The Undeclared Major Program is offered to West Chester students as a way to explore fields of interest before entering a degree program. During this period, of no more than three full semesters at West Chester or another university, the student schedules courses which fulfill the general education requirements. Additional courses may be selected in a wide range of disciplines. The program is administered by the Academic Advising Center located in Lawrence Center. All advising and career exploration occurs in the center, rooms 105 and 132. Graduate assistants who specialize in academic advising work with the faculty advisors.

Students should understand that certain programs may require prerequisites for further study. Completion of such prerequisites, if not undertaken during the period of study as an undeclared major, may prolong university attendance accordingly. This program is not for students who have chosen their program (major) and have not been accepted by the University in that field.

Certain major programs have limited resources which may limit the number of students in the program at any one time. A student may transfer into a program from undeclared status only if: 1, there is a vacancy in the desired program; 2, the head of that program approves; and 3, a formal approved change of major form has been filed in the Office of the Registrar. Students should make inquiry about such vacancies as early as possible during their first year of study.

# Women's Studies

Stacey Schlau, *Coordinator*

**STEERING COMMITTEE:** Betty Boyle, Mary Crawford, Mary Ann Duffy, Robin Garrett, Elizabeth Giangiulio, Madelyn Gutwirth, Pamela Hemphill, Christina McCawley, Mary McCullough, Lynette McGrath, Tahany Naggar, Arlene Rengert, Anne Sessa, Richard Webster, Elizabeth Larsen, Helen Reid, Carol Radich, Patricia Lee, Diane Casagrande.

The Women's Studies Program consists of an interrelated group of courses offered in a wide variety of academic disciplines. The program operates under the supervision of the

Women's Studies Steering Committee. This program is envisaged both as an enrichment to liberal education and as a pre-professional study. The social transformation that is taking place both in society and in intellectual life is making study in this area an asset in many arenas.

The aim of the program is to integrate the perception and experience of women into the curriculum and to encourage inquiry into previously neglected areas, such as women's history, women's literature and art, female psychology, and woman's position in society.

**Women's Studies Courses**

Oral History: (HIS 345)
Biography of Modern European Women (HIS 420)
Psychology of Women (PSY 465)
Health Issues of Women (NSG/HEA 109)
Women in Art (ARH 419)
Women and Politics (PSC 301)
Senior Project (WOS 367)
The Economic Role of Women (ECO 303)
Women in Western Literature (CLS 358)
Women in Modern Fiction (CLS 359)
Women in Modern Theatre (THA 311)
Feminist Poetry (LIT 274)
Women and Men in French Literature (FRE 409)
Teaching Skills to Combat Sexism (EDE 489)
Women Today: An Introduction to Women's Studies (WOS 160)
Women in Sport (PED 380)
Sociology of Sex Roles (SOC 346)
Women and Film (FLM 304)
Special Topics (WOS 200)

These courses are open to all students as free electives under general requirements. With permission of their departments, they may also be taken as electives within the student's program.

### Minor in Women's Studies

A women's studies minor consists of 15 credit hours, no more than 9 of which may be taken in a single department. There is, in addition, an optional 2 credit individualized project. Transcript recognition will be awarded upon its completion.

This minor may be taken as a concentration by students in the A.A. program.

For advising in Women's Studies, contact Dr. Stacey Schlau Main 211.

Descriptions of WOS courses in women's studies appear below. See departmental listings for all other courses.

---

## COURSE DESCRIPTIONS

WOMEN'S STUDIES
Symbol: WOS

**160 Women Today: An Introduction to Women's Studies (3)** An interdisciplinary course designed to enable students to analyze various kinds of statements on women, to question the implications of changing cultural patterns, and to sample, firsthand, efforts for change. P/F option Satisfies interdisciplinary requirement.

**200 Special Topics in Women's Studies (3)** Selected (and changing) topics, e.g. Third World Women; Women in the Workplace; Love, Marriage, and Divorce.

**367 Senior Project (2)** Preparation of research in any area of women's studies, to be decided by student and advisor Supervision includes exercises in method and bibliography

# Commonwealth of Pennsylvania

Robert P. Casey, *Governor*

# State System of Higher Education

James H. McCormick, *Chancellor*

## Board of Governors

F. Eugene Dixon, Jr., *Chairman*
Richard A. Benefield
Muriel Berman
Thomas K. Gilhool
Rebecca F. Gross
Guy Holliday
James A. Hughes
Anne O. Jackson
James L. Larson
Floyd M. Mains
Sean C. Mullen
Eve Y. Murphy
Cynthia Philo
Charles J. Potter
J. Edwards Smith

## West Chester University Council of Trustees

John F. Unruh, *Chairman* ..... Media
Bernard J. Carrozza, *Vice-Chairman* ..... Newtown Square
Johanna K. Havlick, *Secretary* ..... West Chester
William E. Hughes ..... West Chester
J. Curtis Joyner ..... West Chester
James L. Larson ..... Devon
Maria C. Luongo ..... Paramus, N.J.
Norman Mawby ..... Glen Riddle
William E. Mullestein ..... West Chester
Sol Weiss ..... Overbrook Hills
Joseph C. Zoll ..... Philadelphia

## Board of Directors
## West Chester University Foundation

Dr. Alexander Antonowich, *Executive Director*
Mrs. Emilie K. Asplundh
William R. Benner
Dr. Donald J. Diffenbaugh
Mrs. Guy Fry
Mrs. John B. Hannum
Mrs. Thomas Harney
James Latta, Jr.
W. E. Mullestein
David L. Peirce
Whitman Rice
Leslie B. Schramm
Charles E. Swope
Susan P. Windle

## WCU Alumni Association Board of Directors

Leon Bass
Edward E. Beda
Dale Bonsall
Donald J. Diffenbaugh
Michael Ercole
Janice Weir Etshied
Chris Franklin
John Furlow
Johanna Havlick
Karl Helicher
Gerald Horna
Leroy Jenkins
Barbara Lappano
Jorge Leon
Richard D. Merion
William D. Mulvihill
John F. Murphy
William Smedley
Luther Sowers
Laura M. Trexler
Doris Woerth

# Administration

| | |
|---|---|
| President | Dr. Kenneth L. Perrin |
| Director, Affirmative Action and Special Assistant to the President | Mr. Lawrence A. Dowdy |
| Director, University Advancement | Mr. Paul C. Hassenplug |
| Director, Alumni Relations | Mr. Jeffrey Plain |
| Director, Public Relations | Mrs. Joanne L. Matika |
| Director, Publications | Miss Ann F. Diseroad |
| Director, Research and Planning | Dr. Martin J. Higgins |
| Director, Athletics | Mr. Richard B. Yoder |
| Provost and Vice-President for Academic Affairs | Dr. Stanley J. Yarosewick |
| Dean, Faculty of Arts and Sciences (Acting) | Dr. William M. Morehouse |
| Director, Faculty of Arts and Sciences | Dr. Thomas J. Heston |
| Director, Faculty of Arts and Sciences | Dr. Carmela L. Cinquina |
| Dean, Faculty of Professional Studies (Acting) | Dr. Patricia T. Lee |
| Director, School of Business and Public Affairs | Dr. Arlene Rengert |
| Director, School of Education | Dr. Shirley A. Walters |
| Director, School of Health Sciences | Ms. Elena F. Stuart |
| Director, School of Music | Dr. James D. Sullivan |
| Director, Library Services | Mr. Frank Q. Helms |
| Director, Academic Computing Services | Dr. James D. Fabrey |
| Dean, Graduate Studies and Sponsored Research | Dr. M. Raj Karim |
| Dean, University College | Dr Eugene Kray |
| Assistant Dean, University College | Ms. Rhoda Todd |
| Director, Summer Sessions | Dr. Walter E. Buechele, Jr. |
| Associate Vice-President for Academic Affairs (Acting) | Dr. Philip M. De Moss |
| Director, Center for Academic Excellence | Dr. Vivian C. Nix-Early |
| Director, Academic Advising Center | Mr. Theodore H. Butcher |
| Director, Academic Development Program | To be appointed |
| Director, Admissions (Interim) | Ms. Marsha Haug |
| Director, Financial Aid | Mr. Dana Parker |
| Director, Retention | Ms. Nancy Kenner |
| Director, Space Management and Calendar | Dr. William Torop |
| Registrar (Acting) | Mr. Robert A. Kubat |
| Vice-President for Administrative and Fiscal Affairs | Mr. Joseph D. Hamel |
| Director, Personnel | Mr. William H. Schweitzer |
| Director, Facilities, Management and Operations | Mr William A. Peoples |
| Director, Public Safety | Mr. Jeffery B. Horton |
| Director, Management Information Systems and Computer Facilities | Dr. Thomas Egan |
| Director, Administrative Computing | Mr. Wesley E. Fasnacht |
| Director, Finance | Mr. Thomas Ford |
| Budget Director (Acting) | Mr. Richard Griffing |
| Internal Audit | Mr. Roy McConnell |
| Accounting Supervisor, Student Accounts | Mr. Robert J. Bonner |
| Vice-President for Student Affairs | Dr. Rodger Summers |
| Dean, Students | Dr. Matthew J. Bricketto |
| Associate Dean, Students | Ms. Diane DeVestern |
| Director, Career Development Center | Mr. Walter R. Blair |
| Director, Counseling Center | Dr. George F. Kane |
| Director, Health Center | Dr. Philip E. Kistler |
| Director, Residence Life | Mr. Thomas J. Purce |
| Associate Director, Residence Life | Mr Robert H Jensen |
| Assistant Director, Residence Life | Ms. Amy Dickenson Young |
| Director, Orientation and Parents Relations | To be appointed |
| Associate Director, Orientation and Parents Relations | Ms. Jacklyn Hudak |
| Director, Recreational Services | Mr. Edward C. Bitner |

| | |
|---|---|
| Director, Sykes Union | Vacant |
| Director, Co-Curricular Programs | Mr. Joseph Drabyak |
| Director, Women's Center | Ms. Robin Garrett |
| Alcohol Education Specialist | Ms. Jacqueline Hodes |
| Director, Children's Center | Ms. Gail Shankweiler |
| Director, Student Standards | Ms. Barbara A. De Lozier |

# Faculty

KENNETH L. PERRIN (1980) *President*
B.A , Occidental College, M S., California State University at Long Beach; Ph.D., Stanford University Medical School

STANLEY J. YAROSEWICK (1969) *Provost and Vice-President for Academic Affairs*
B.S., University of New Hampshire, M.S., Ph.D., Clarkson College of Technology

WILLIAM M MOREHOUSE (1969) *Acting Dean, Faculty of Arts and Sciences, Professor of Communication and Theatre*
B.S., M.S., Ph.D., Purdue University

PATRICIA T LEE (1978) *Acting Dean, Faculty of Professional Studies; Associate Professor of Keyboard Music*
B.A., Mills College; M A , Yale University, D.M.A , Temple University

M. RAJ KARIM (1985) *Dean of Graduate Studies and Sponsored Research*
B Sc. (Hons.) Karachi University; M.S., University of Minnesota; Ph.D., University of Montana

EUGENE J KRAY (1985) *Dean, University College*
B.S., St. Peter's College; M B.A., Seton Hall University; Ed D., Nova University

PHILIP M DE MOSS (1972) *Acting Associate Vice-President for Academic Affairs, Associate Professor of Economics*
B.A , Park College; M.A , Ph.D., Kansas State University

JOSEPH D HAMEL (1985) *Vice-President for Administrative and Fiscal Affairs*
B B.A , M.B.A., Syracuse University

RODGER SUMMERS (1984) *Vice-President for Student Affairs*
B.S., Cheyney University; M.A., University of Vermont; Ed D., Indiana University

---

THOMAS J. AHLBORN (1967) *Associate Professor of Mathematics*
B.S., California University; M A., Kent State University

SYLVIA MOSS AHRAMJIAN (1976) *Assistant Professor of Instrumental Music*
B Mus., Juilliard School of Music; M Mus., Indiana University, Bloomington

SHIRLEY T. ALIFERIS (1968) *Associate Professor of Keyboard Music*
A.R C.T., Royal Conservatory of Music of Toronto; Artist, Diploma, University of Toronto, M.Mus., Indiana University

LEILA B. ALSON (1973) *Assistant Professor of Speech Pathology and Audiology*
B.A., Hunter College, M A., Ohio University

LOIS W ALT (1966) *Associate Professor of Vocal and Choral Music*
B S., Indiana University of Pennsylvania, B.Mus., M Mus., University of Michigan

LISBETH ANDERS-MERZ (1985) *Assistant Professor, Counseling Center*
B.S., Chestnut Hill College, M.A , Villanova University; Psy.D., Hahnemann University

LESTER F. AUNGST (1973) *Associate Professor of Communicative Disorders*
B A , Augustana College, M S., Ph D., Pennsylvania State University

JULIANNE BAIRD (1986) *Assistant Professor of Vocal/Choral Music*
B.A., M.A., Eastman School of Music

JOHN H. BAKER (1974) *Instructor of Art*
B A , West Chester University

ANGELOS C. BALLAS (1972) *Professor of Business Administration*
B.S., M.A., New York University, Ph D., New School for Social Research

PAUL A. BANYACSKI (1965) *Associate Professor of Philosophy*
B.A., Eastern College

JUDITH BARON (1974) *Psychologist, Counseling Center, Associate Professor*
B.A., M.A , University of Michigan, Ph D., York University, Toronto

EDWARD A. BARROW (1956) *Chairperson, Department of Instrumental Music, Professor*
B.Mus., M.Mus., Eastman School of Music; Ph.D., West Virginia University

ROGER BARTH (1985) *Assistant Professor of Chemistry*
B.A., La Salle University; M.A., Ph.D., Johns Hopkins University

CHARLOTTE E. BARTLETT (1972) *Associate Professor of Social Work*
B.A., University of Pennsylvania; M S.S., Bryn Mawr College

MARSHALL J. BECKER (1968) *Professor of Anthropology*
B.A., M.A., Ph.D., University of Pennsylvania

ROBERT M BEDFORD (1966) *Associate Professor of Keyboard Music*
B.Mus., M S., The Juilliard School

CAROL BELMAIN (1971) *Associate Professor of Music Education*
B S., M.S., Ithaca College; D.M.A., Temple University

JOHN T BENESKI (1986) *Assistant Professor of Biology*
A.A., Southwestern College; B.A., M.A , Humboldt State University; Ph.D., Washington State University

JAY H. BERKOWITZ (1969) *Associate Professor of Communication and Theatre*
B S., M.A., Temple University

ROBERT W BERNHARDT (1965) *Associate Professor of Biology*
B S., M.S., Syracuse University

F. ROBERT BIELSKI (1961) *Chairperson, Department of Government and Planning; Associate Professor of Geography*
B S., Indiana State University; M A , University of Illinois

EDWARD C. BITNER (1972) *Assistant Professor of Physical Education*
B.S , West Chester University; M.S., University of Southern California

BARBARA R BLACK (1970) *Assistant Professor, Educational Services*
B S., Cheyney University; M.A , Kean College

WALTER R. BLAIR (1966) *Director of Career Development Center; Associate Professor*
B.S., West Chester University; M Ed., Temple University

RICHARD E. BLAKE (1975) *Assistant Professor of Art*
B.F.A., Tyler School of Fine Arts

RICHARD A BOERLIN (1961) *Associate Professor of Instrumental Music*
B.S., M.S., University of Illinois

DALE R BONSALL (1969) *Associate Professor of Physical Education*
B.S., West Chester University; M.Ed., Western Maryland College

ROGER E. BOVE (1984) *Associate Professor of Economics*
B.A., Harvard College; M A., Ph D , Harvard University

BETTY FINCH BOYLE (1972) *Assistant Professor of Health*
B.S., Ball State University; M Ed , West Chester University

THOMAS J. BRADY (1967) *Professor of Political Science*
B.S., West Chester University; J.D., Temple University

ERMINIO BRAIDOTTI (1978) *Assistant Professor of Foreign Languages*
B.A., Youngstown State University; M A , Middlebury College; Ph.D., University of Pennsylvania

RICHARD G. BRANTON (1962) *Professor of Mathematics*
B.S., West Chester University; M.S., University of Delaware; Ph.D., University of Pennsylvania

LINDA S. BREUNIG (1978) *Instructor, Educational Services*
B.S., M.A , West Chester University

JAMES B BRICE (1968) *Associate Professor of Childhood Studies and Reading*
B.S., M.Ed , West Chester University; M.A , Villanova University

MICHAEL W BROOKS (1971) *Professor of English*
B A , Antioch College, M.A., Ph.D , University of Toronto

BARBARA S BROWN (1983) *Assistant Professor of Nursing*
B.S.N., University of Pennsylvania, M.S., University of Oxford (England); M.S N., University of Pennsylvania

EMMA LEE BROWN (1969) *Associate Professor of Library Services*
A B., Fairmont State College, M S.L.S., Drexel University

FRANCELINE H. BROWN (1984) *Assistant Professor of Library Services*
B.A., Linderwood College, M.S.L.S., Drexel University

ROGER J. BROWN (1968) *Assistant Professor of Foreign Languages*
B.S., West Chester University

WILLIAM C. BROWN (1968) *Associate Professor of Biology*
B S., M.Ed., Bloomsburg University

JOSEPH BROWNE (1966) *Professor of English*
Diplome En Philosophie, St. Jerome's College (University of Ottawa); B.S., St Joseph's University (Pa ); M.A., Ph.D., University of Pennsylvania

WALTER E. BUECHELE, JR (1962) *Director of Summer Sessions; Professor of Counselor, Secondary, and Professional Education*
B.S., West Chester University; Ed M., Ed.D., Temple University

H. JAMES BURGWYN (1968) *Professor of History*
B A., Swarthmore College, M.A., University of Pennsylvania, Ph.D., University of Pittsburgh

WILLIAM F BURNS (1964) *Assistant Chairperson, Department of Government and Planning; Associate Professor of Political Science*
B.A., Allegheny College; M.A , Case Western Reserve University

A WAYNE BURTON (1965) *Associate Professor of Political Science*
B.A , Brigham Young University; M.A , University of Pennsylvania

THEODORE H. BUTCHER (1970) *Director, Academic Advising Center; Associate Professor, Educational Services*
B.A., Lincoln University; M B.A., Drexel University

ROBERT E. BYTNAR (1975) *Assistant Professor of Communication and Theatre*
B.S. Ed., California University; M.A., West Virginia University

KITTY C. CALDWELL (1972) *Assistant Professor of Physical Education*
B.S., M.Ed , West Chester University

S. REED CALHOUN (1983) *Associate Professor of Business Administration*
B.S., Indiana University; M.Ed., Ed D., University of Pittsburgh

DIANE O CASAGRANDE (1968) *Professor of Communication and Theatre*
A.B , Wayne State University; M.A , Ph.D . Temple University

LOUIS A CASCIATO (1963) *Associate Professor of Earth Sciences*
B S , St Joseph's College (Pa.); M.S., Villanova University

CONRAD E CHALICK (1962) *Psychologist, Counseling Center, Professor*
B A., Pennsylvania Military College; M.A., Villanova University; Ed D , Nova University

NONA E. CHERN (1968) *Associate Professor of Childhood Studies and Reading*
B.S., Temple University; M.S., University of Pennsylvania, Ed D , Temple University

K ELEANOR CHRISTENSEN (1972) *Assistant Chairperson, Department of Childhood Studies and Reading, Associate Professor*
B.A., M.A , Michigan State University; Ph.D., University of Delaware

HUNG M CHU (1976) *Chairperson, Department of Business Administration; Professor of Business Administration*
B.S., St Joseph's College (Indiana); M B.A., Northern Illinois University; Ph.D., Louisiana State University

CARMELA L. CINQUINA (1963) *Director, Faculty of Arts and Sciences; Professor of Biology*
B.S., West Chester University; M.S., Villanova University, Ph.D., Rutgers — The State University

GEORGE S. CLAGHORN (1963) *Chairperson, Department of Philosophy; Professor*
B A , University of Chattanooga, Ph.D., University of Pennsylvania

JAY L. CLARK (1967) *Professor of Psychology*
B.A., University of Delaware; M A . Ph.D., University of Minnesota

MARY ELIZABETH CLEARY (1967) *Assistant Chairperson, Department of Counselor, Secondary and Professional Education, Professor*
B.A , St Joseph's College for Women, A M., Ed.D., George Washington University

PATRICIA COUGHLAN-STOW (1984) *Instructor of Nursing*
B.S.N , M.S.N , University of Pennsylvania; Diploma in Nursing, Thomas Jefferson University

BERNARD B COHEN (1974) *Professor of Psychology*
B A , Temple University; Ph.D., New York University

IRVING HERSCH COHEN (1969) *Professor of Music History*
B A., M.A , Ph.D., New York University

UEL W COMBS, JR. (1967) *Assistant Chairperson, Department of English, Assistant Professor*
B.A., Adams State College; M.A., Temple University

KATHERINE A. CONROY (1983) *Instructor of Nursing*
B S., Rutgers State University; M.S., Boston University

JON A. COWEN (1967) *Assistant Professor of Sociology*
B.A , University of Massachusetts, A.M , University of Pennsylvania

MARY E CRAWFORD (1978) *Professor of Psychology and Women's Studies*
B.S., West Chester University; M A., Ph.D , University of Delaware

W STEPHEN CRODDY (1969) *Professor of Philosophy*
B.A., University of Southern California, M A., Temple University; Ph D , Brown University

FLORENCE JOSEPH CROWLEY (1968) *Professor of History*
B A., M A., Brooklyn College; Ph D., University of Florida

GEORGANN CULLEN (1964) *Assistant Chairperson, Department of Biology; Associate Professor*
B S , M.A , Kent State University

RONALD N DEFINO (1973) *Assistant Professor of Art*
B.S., Philadelphia College of Art, M.F.A , Tyler School of Art

HARRY H DEISCHER (1966) *Professor of Counselor, Secondary, and Professional Education*
B S., M A . Ed D., University of Pennsylvania

LUBOMYR W DEMIANTSCHUK (1986) *Assistant Professor of Business Administration*
B S., University of Barcelona, M.B.A., University of Pennsylvania

THOMAS DE MOTT (1969) *Professor of Biology*
A.M.E., Widener University; V.M D., University of Pennsylvania

KATHLEEN DEVLIN-KELLY (1976) *Assistant Professor of Nursing*
B.S.N., Georgetown University; M.S.N , Georgetown University; M S.N , Boston University

ANDREW E., DINNIMAN (1972) *Chairperson, Educational Services; Associate Professor*
B.A , University of Connecticut, M.A., University of Maryland, Ed D., Pennsylvania State University

PHILLIP B. DONLEY (1965) *Professor of Physical Education*
B S., M.S., West Virginia University; Certificate in Physical Therapy, D.T , Watson School of Physiatrics

W. LARRY DORMINY (1972) *Associate Professor of Vocal and Choral Music*
B.Mus., Jacksonville University; M M , Florida State University; D.M., Indiana University

RAYMOND A. DOYLE (1965) *Associate Professor of History*
B.S., M.S , West Chester University

MARY ANNE DUFFY (1969) *Assistant Professor of Library Services*
A B., Immaculata College; M.S.L.S., Drexel University

PHILIP K. DUNCAN (1983) *Associate Professor of Psychology*
B.A , Wittenberg University; M A., Western Michigan University; Ph.D., University of Florida

A SCOTT DUNLAP (1967) *Associate Professor of Childhood Studies and Reading*
B A., King's College (N Y.); M Div., Eastern Baptist Theological Seminary

KEVIN C. DUNLEAVY (1979) *Assistant Professor of Economics*
B.A , University of Delaware; Ph.D , Duke University

MARC L. DURAND (1968) *Professor of Chemistry*
B.S., Holy Cross College; Ph.D., University of New Hampshire

JOHN L. EBERHART (1969) *Chairperson, Department of Communicative Disorders, Assistant Professor*
B S , Bloomsburg University; M A , Syracuse University

T OBINKARAM ECHEWA (1986) *Assistant Professor of English*
B.S., University of Notre Dame, M S Columbia University; M A University of Pennsylvania, Ph D Syracuse University

HOWARD EDELMAN (1981) *Assistant Professor of Mathematical Sciences*
B.Ch E., City University of New York, M S., C.S , University of Delaware

THOMAS EGAN (1968) *Director of Computer Facilities and Management Information Systems; Professor, Educational Services*
B.S., M.Ed., West Chester University; Ed D., University of Pennsylvania

JOHN E. EHLEITER (1969) *Associate Professor of Geology*
A.B., M.A., Franklin and Marshall College; M.A., Wesleyan University; D.Ed., Pennsylvania State University

RALPH A. EISENSTADT (1965) *Assistant Professor of Foreign Languages*
B.A., University of Pennsylvania, M.A., University of Illinois

DAVID S. ELDREDGE (1967) *Associate Professor of Political Science*
B.A., Yale University; M.A.T., C.A.S., Harvard University

MARIANNE ELEUTERIO (1973) *Associate Professor of Biology*
B.S., Michigan State University; Ph.D., University of Delaware

PAUL R. EMMONS (1985) *Assistant Professor of Library Services*
B. Mus., Lawrence University of Wisconsin; M.M., M.S., University of Illinois

JORGE ESCORCIA (1968) *Associate Professor of Foreign Languages*
Lic., Universidad Pedagogica del Caribe; M.A., Boston University

JAMES D. FABREY (1975) *Director of Academic Computing, Professor of Mathematics*
A.B., Cornell University; Ph.D., Massachusetts Institute of Technology

G. WINFIELD FAIRCHILD (1983) *Assistant Professor of Biology*
B.A., Hamilton College, M.S., Ph.D., University of Michigan

JOSEPH FALGIE, JR. (1970) *Professor of English*
B.A., Temple University; M.A., Ph.D., University of Pennsylvania

WESLEY E. FASNACHT (1967) *Director of Administrative Computing, Associate Professor of Educational Services*
B.S., Millersville University; M.S., State University of New York at Buffalo

JOHN J. FENTON (1980) *Professor of Chemistry*
B.A., Catholic University of America; Ph.D., University of Minnesota

ROSE L. FICKNER (1979) *Assistant Professor of Nursing*
Diploma, Hazleton State General Hospital School of Nursing, B.S., West Chester University; M.S.N., University of Pennsylvania

RICHARD W. FIELDS (1980) *Instructor of Keyboard Music*
B.M., M.M., The Juilliard School

ALBERT E. FILANO (1956) *Professor of Mathematics*
B.S., M.S., University of Pennsylvania; Ph.D., Pennsylvania State University

JUDITH S. FINKEL (1968) *Assistant Professor of Special Education*
B.S., Temple University; M.Ed., West Chester University; M.A. Trenton State College, M.A., Trenton State College

CHRISTOPHER R. FIORENTINO (1985) *Assistant Professor of Economics*
B.A., M.A., Ph.D., Temple University

FRANK E. FISH (1980) *Assistant Professor of Biology*
B.A., S.U.N.Y. at Oswego; M.S., Ph.D., Michigan State University

JOSEPH T. FISHER (1968) *Associate Professor of Health*
B.S., Slippery Rock University; M.S., University of Illinois

ANITA K. FOEMAN (1982) *Assistant Professor of Speech Communication and Theatre*
B.A., Defiance College, M.A., Ph.D., Temple University

WILLIAM D. FORDYCE (1968) *Associate Professor of English*
A.B., A.M.T., A.M., Ph.D., Harvard University

CLAUDE R. FOSTER, JR. (1967) *Professor of History*
B.A., Eastern College; B.D., The Reformed Episcopal Seminary, M.A., University of Delaware, Th.M., Crozer Theological Seminary; Zeugnis fuer deutsche Sprache and Kultur, University of Freiburg; Ph.D., University of Pennsylvania

FRANK FOX (1967) *Professor of History*
B.S., Temple University; M.A., University of Pennsylvania; Ph.D., University of Delaware

WALTER J. FOX, JR. (1983) *Assistant Professor of Journalism and English*
B.S., St. Joseph's University; M.S., Columbia University

HOWARD FREEMAN (1961) *Professor of Special Education*
B.S., Millersville University; M.A., University of Wyoming, Ed.D., University of Pennsylvania

BONITA FREEMAN-WITTHOFT (1974) *Director, Ethnic Studies, Associate Professor of Anthropology*
B.A., University of Maine; M.A., Ph.D., University of Pennsylvania

MARY L. FRENZ (1967) *Associate Professor of Vocal and Choral Music*
B.Mus., M.Mus., Westminster Choir College

H. RAYMOND FRIDAY (1969) *Associate Professor of Vocal and Choral Music*
B.S., West Chester University; M.Mus., Oberlin College; Diploma, Academy of Vocal Arts, Ph.D., New York University

JOHN J. FURLOW (1961) *Associate Professor of Physical Education*
B.S., M.Ed., West Chester University

ANGELO F. GADALETO (1986) *Associate Professor of Counselor, Secondary and Professional Education*
B.A., Rider College; M.Ed., University of Delaware, Ph.D., University of Virginia

CLYDE J. GALBRAITH (1974) *Chairperson, Department of Accounting; Assistant Professor*
B.S., M.B.A., Drexel University; C.P.A., Commonwealth of Pennsylvania

CHARLES D. GANGEMI (1961) *Associate Professor of Music Theory and Composition*
B.Mus., M.A., University of Pennsylvania

ROBIN GARRETT (1978) *Assistant Professor of Nursing*
B.S.N., Case Western Reserve University; M.S.N., University of Pennsylvania

JOHN L. GAUNT (1970) *Professor of English*
B.A., M.A., Tulane University; Ph.D., University of Maryland

JAMAL GHOROGHCHIAN (1986) *Assistant Professor of Chemistry*
B.S., University of Moshad (Iran); M.S., Ph.D., University of Southhampton (England)

ELIZABETH A. GIANGIULIO (1972) *Associate Director, Career Development Center*
B.S., West Chester University; M.Ed., University of Arizona

EDWARD H. GIBSON (1967) *Professor of Childhood Studies and Reading*
B.S., West Chester University; M.Ed., Lehigh University; Ed.D., Nova University

STEPHEN D. GILMOUR (1979) *Assistant Professor of Foreign Languages*
B.A., M.A., Indiana University; M.A., Ph.D., University of Minnesota

JOSEPH J. GODEK III (1972) *Assistant Professor of Physical Education*
B.S., University of Delaware; M.S., West Chester University

JOSEPH A. GOEBEL, JR. (1968) *Instructor of Instrumental Music*
B.S., Millersville University

PHYLLIS A. GOETZ (1975) *Associate Professor of Health*
B.S., West Chester University; M.S., Ph.D., University of Maryland

CHARLES W. GOOD (1966) *Professor of Counselor, Secondary, and Professional Education*
B.A., Pennsylvania State University; M.A., University of Pennsylvania, Ed.D., Temple University

HENRY E. GOODWIN (1960) *Associate Professor of Physical Education*
B.S., Lock Haven University; M.S., Pennsylvania State University

RONALD L. GOTTSHALL (1966) *Assistant Chairperson, Department of Counselor, Secondary, and Professional Education, Associate Professor*
B.S., Shippensburg University; M.A., Michigan State University

ANDREW J. GOUDY (1977) *Chairperson, Department of Chemistry; Professor*
B.S., M.S., Indiana University of Pennsylvania, Ph.D., University of Pittsburgh

RONALD L. GOUGHER (1969) *Chairperson, Department of Foreign Languages; Associate Professor*
B.A., Muhlenberg College; M.A., Lehigh University

JOHN H. GRAFTON (1961) *Assistant Chairperson, Department of Childhood Studies and Reading, Assistant Professor*
B.S., West Chester University; M.A., Scarritt College

CHARLES W. GRASSEL (1968) *Associate Professor of Geography*
B.S., West Chester University; M.S., University of Pennsylvania

PATRICIA E. GRASTY-GAINES (1970) *Associate Professor of Childhood Studies and Reading*
B.S., West Chester University; M.Ed., Ed.D., Temple University

ANDREW W. GREEN (1970) *Professor of Business Administration*
B.S., New York University; L.L.B., Dickinson School of Law; Diploma in European Integration, University of Amsterdam, M.B.A., Ph.D., University of Pennsylvania

PAUL D. GREEN (1971) *Professor of English*
A.B., Temple University; A.M., Ph.D., Harvard University

SAUL H. GREENBERG (1963) *Chairperson, Department of Criminal Justice; Associate Professor*
B.S., M.Ed., Pennsylvania State University; J.D., Baltimore University

SEYMOUR S. GREENBERG (1964) *Professor of Geology*
B.S., Brooklyn College; A.M., Ph.D., Indiana University

ROBERT GREENE (1967) *Assistant Professor of Foreign Languages*
B.A., M.A., University of Pennsylvania

MILDRED L. GREENWOOD (1965) *Assistant Chairperson, Department of Physical Education; Associate Professor*
A.B., Wheaton College; M.Ed., Temple University

HARVEY C. GREISMAN (1979) *Professor of Sociology*
B.A., State University of New York at New Paltz, M.A., Ph.D., Syracuse University

SHIRLEY R. GRICE (1972) *Assistant Professor of Speech Communication and Theatre*
B.S., M.Ed., West Chester University

FRANK GROSSHANS (1975) *Professor of Mathematics*
B.S., University of Illinois, Ph.D., University of Chicago

TERRY E. GUIDETTI (1966) *Associate Professor of Instrumental Music*
B.Mus., M.Mus., Northwestern University

MADELYN GUTWIRTH (1966) *Professor of Foreign Languages and Women's Studies*
B.A., Brooklyn College; M.A., Ph.D., Bryn Mawr College

WILLIAM I. GUY (1974) *Instructor, Educational Services*
A.B., Temple University

JAMES E. HABECKER (1964) *Associate Professor of Childhood Studies and Reading*
A.B., Franklin and Marshall College; M.Ed., Western Maryland College; Ed.D., University of Pennsylvania

JOSEPH C. HALL (1972) *Professor of Childhood Studies and Reading*
B.S., Ed.M., Ed.D., Temple University

SAUNDRA M. HALL (1964) *Assistant Professor of Communication and Theatre and Women's Studies*
B.A., M.A., Ohio State University

HUBERT E. HARBER (1970) *Associate Professor of Astronomy*
B.S., Louisiana State University; M.B.S., University of Colorado; M.A.T., Brown University

CLIFFORD H. HARDING (1953) *Professor of History*
A.B., Peru State College; M.A., University of Iowa; Ph.D., New York University

JEFFREY E. HARRIS (1983) *Assistant Professor of Health*
B.A., University of California at San Diego; D.H.Sc., M.P.H., Loma Linda University

SHIRLEY HARRISON (1974) *Assistant Professor of Nursing*
R.N., Albert Einstein School of Nursing; B.S., West Chester University; M.S.N., University of Pennsylvania

YOKO HASHIMOTO-SINCLAIR (1969) *Associate Professor of Communication and Theatre*
B.A., M.A., Aoyama Gakuin University (Japan); M.A., Ph.D., University of Michigan

JOAN HASSELQUIST (1968) *Chairperson, Department of Childhood Studies and Reading; Associate Professor of Childhood Studies and Reading and Women's Studies*
B.S., Ed.M., Ed.D., Temple University

EUGENE C. HASSLER (1969) *Associate Professor of Accounting*
B.S., Albright College; M.B.A., Indiana University; C.P.A., State of Indiana

ELIZABETH A. HASSON (1970) *Assistant Professor of Childhood Studies and Reading*
B.S., M.Ed., West Chester University; Ed.D., Temple University

ROBERT W. HAWKES (1962) *Associate Professor of Physics*
B.S., West Chester University; M.S., Pennsylvania State University

ARTHUR T. HEGVIK (1975) *Associate Professor of Instrumental Music*
B.M., M.M., University of Michigan

FRANK Q. HELMS (1966) *Director, Library Services; Associate Professor*
B.A., University of Delaware, M.L.S., Rutgers — The State University

PAMELA HEMPHILL (1970) *Professor of Art and Women's Studies*
B.A., Manchester University; Ph.D., University of Pennsylvania

THOMAS J. HESTON (1975) *Director, Faculty of Arts and Sciences, Professor of History*
A.B., Gettysburg College; M.A., Ph.D., Case Western Reserve University

MARTIN J. HIGGINS (1967) *Director, Research and Planning; Professor*
B.S., University of Dayton; M.A., Ph.D., University of Maryland

WALTER J. HIPPLE (1976) *Professor of Philosophy*
B.A., M.A., Ph.D., University of Chicago; Litt.D., Shimer College

CHERYL HODGINS (1979) *Assistant Professor of Social Work*
B.A., University of New Hampshire; M.S.W., University of Texas

THOMAS L. HOLDER (1986) *Instructor of Physics*
B.S. Ed., California State University; M.Ed., Millersville University

JOHN HOLINGJAK, JR. (1965) *Associate Professor of Counselor, Secondary, and Professional Education*
B.S., Kutztown University; Ed.M., Temple University

E. RILEY HOLMAN (1972) *Professor of Childhood Studies and Reading*
B.S., Southern Utah State College; M.S., Ed.D., Brigham Young University

SUNION T. HONG (1986) *Professor of Accounting*
B.A., Han Kuk University (Korea); M.B.A., Ph.D., New York University

YI-MING HSU (1975) *Associate Professor of Secondary Education and Educational Psychology*
B.A., National Taiwan University; M.A., University of Oregon; D.Ed., University of Georgia

CLAUDE HUNSBERGER (1967) *Associate Professor of English*
B.A., Temple University; M.A., Michigan State University; Ph.D., University of Wisconsin

LAWRENCE V. IACONO (1966) *Associate Professor of Political Science*
B.S., St. Joseph's University (Pa.); M.Ed., West Chester University

JOHN M. JACECKO (1967) *Associate Professor of Childhood Studies and Reading*
B.S., M.Litt., University of Pittsburgh; Ed.D., Nova University

RONN M. JENKINS (1972) *Advising Center; Assistant Professor*
B.S., West Chester University; M.S., Bucknell University; Ed.D., University of Pennsylvania

ROBERT H. JENSEN (1969) *Director, Off-Campus Life, Assistant Professor*
B.A., Randolph-Macon College; M.A., University of Pennsylvania

CONSTANTINE JOHNS (1954) *Professor of Music History*
B.S., Southeast Missouri State College; M.A., Ed.D., Columbia University

ALLEN H. JOHNSON (1974) *Associate Professor of Geology*
B.S., University of Illinois, M.S., University of Arizona, Ph.D., Case Western Reserve University

PATRICIA C. JOHNSON (1966) *Professor of History*
B.A., Chestnut Hill College, Ph.D., University of Rochester

EMLYN H. JONES (1968) *Assistant Chairperson, Department of Physical Education; Assistant Professor*
B.S., M.Ed., West Chester University

MILDRED C. JOYNER (1981) *Chairperson, Department of Social Work, Assistant Professor*
B.S.W., Central State University; M.S.W., Howard University

WALLACE J. KAHN (1977) *Assistant Chairperson, Department of Counselor, Secondary, and Professional Education; Associate Professor of Counselor Education*
B.S., Bloomsburg University; M.Ed., A.G.S., Ph.D., University of Maryland

GEORGE F. KANE (1966) *Chairperson and Director of Counseling Center; Professor*
B.A., Ursinus College; M.Ed., Temple University, Ed.D., University of Pennsylvania

BRENT KAPLAN (1968) *Associate Professor of Physics*
B.M.E., M.M.E., New York University

BARBARA L. KARAS (1966) *Associate Professor of Physical Education*
B.S., West Chester University; M.Ed., Temple University

CAROLYN B. KEEFE (1969) *Associate Professor of Communication and Theatre*
A.B., Oberlin College; M.A., Temple University, M.A., Villanova University; Ed.D., University of Pennsylvania

MARY A. KEETZ (1973) *Director, Women's Institute, Professor of Childhood Studies and Reading*
B.S., University of Delaware, M.S., Ph.D., University of Pennsylvania

JAMES T. KELLEHER (1968) *Associate Professor of English*
B.A., Widener College, M.A., Ph.D., University of Pennsylvania

JOHN T. KELLY (1969) *Associate Professor of English*
B.S., St. Louis University; M.A., Ph.D., University of Oklahoma

JOHN P. KENT (1972) *Professor of English*
B.A., Southhampton University (England); M.A., Ph.D., University of Illinois

JOHN J. KERRIGAN (1972) *Associate Professor of Mathematics*
B.S., West Chester University; M.A., Villanova University; D.Ed., Temple University

EUGENE KLEIN (1967) *Associate Professor of Instrumental Music*
B.M.E., Temple University; M.M.E., Indiana University

DENNIS R. KLINZING (1976) *Chairperson, Department of Speech Communication and Theatre; Associate Professor*
B.S., Clarion University; M.A., Ph.D., Pennsylvania State University

MAUREEN T. KNABB (1986) *Assistant Professor of Biology*
B.S., St. Joesph's University; Ph.D., University of Virginia

SEBASTIAN S. KOH (1970) *Professor of Mathematics*
B.S., National Taiwan University; M.A., Wayne State University; Ph.D., University of California

V. KRISHNA KUMAR (1977) *Professor of Psychology*
B.S., Osmania University (India); M.S., Indian Agricultural Research Institute; M.S., Ph.D., University of Wisconsin

ROBERT S. KURZINSKY (1970) *Assistant Professor*
B.S., Bloomsburg University; M.Ed., West Chester University

MARY B. LACOSTE (1985) *Assistant Professor of Special Education*
B.A., Loyola University; M.Ed., Louisiana State University; Ed.D., University of New Orleans

MONITA LANK (1970) *Assistant Chairperson, Department of Physical Education, Professor*
A.B., M.A., Wichita State University; Ph.D., University of Iowa

BARBARA J. LAPPANO (1970) *Assistant Professor of Physical Education*
B.S., M.Ed., West Chester University

ELIZABETH LARSEN (1984) *Assistant Professor of English*
B.A., University of Minnesota, M.A., Ph.D., University of Wisconsin-Milwaukee

VICTOR LASUCHIN (1970) *Associate Professor of Art*
B.F.A., M.F.A., University of Pennsylvania

KENNETH L. LAUDERMILCH (1968) *Professor of Instrumental Music*
B.S., Lebanon Valley College; M.Mus., New England Conservatory of Music; D.M.A., Catholic University of America

JOSEPH C. LAULETTA (1973) *Assistant Professor of Physical Education*
B.S., University of Delaware, M.Ed., Boston University

HERBERT LEE (1968) *Associate Professor of Educational Services*
B.S., M.Ed., West Chester University

F. WILLIAM LEEDS (1963) *Associate Professor of Counselor, Secondary, and Professional Education*
A.B., Temple University; M.A., University of Pennsylvania

JOHN D. LEMCKE (1965) *Professor of Health*
B.S., State University of New York College at Brockport; M.Ed., Ed.D., Temple University

MONICA P. LEPORE (1983) *Assistant Professor of Physical Education*
B.S., College of Mount Saint Vincent, M.S., University of Wisconsin

JAMES E. L'HEUREUX (1969) *Professor of Mathematics*
B.S., M.S., Ph.D., Louisiana State University

ELIZABETH LOGAN (1965) *Associate Professor of Psychology*
B.A., Albright College; M.A., Temple University

MELVIN M. LORBACK (1957) *Associate Professor of Physical Education*
B.S., State University of New York College at Brockport, M.S., Pennsylvania State University

JOHN M. LOWE, JR. (1970) *Professor of Physical Education*
B.S., M.S., West Virginia University; Ed.D., University of Toledo

SUSAN W. LUBKING (1978) *Associate Director of Athletics; Assistant Professor of Physical Education*
B.S., Ursinus College; M.Ed., Temple University

ROBERT C. LUCAS (1975) *Associate Professor of Keyboard Music*
B.M., Oberlin College, M.M., University of Michigan; Ed.D., Columbia University

PATRICK W. LUCK (1973) *Associate Professor of Sociology*
B.A., University of Vermont, M.A., Ph.D., University of Connecticut

GLENN LYONS (1984) *Assistant Professor of Instrumental Music*
B.A., Harpur College; M.Mus., Peabody Institute of Johns Hopkins University

MARY ANN O. MAGGITTI (1970) *Assistant Professor of Educational Services*
B.A., Emmanuel College; M.S., Central Connecticut State College

VIRGIL E. MAGNUSON (1975) *Associate Professor of Chemistry*
B.A., Monmouth College, Ph.D., University of New Hampshire

JOHN P. MAHER (1986) *Instructor of Health*
B.S., St. Peter's College; M.P.H., Harvard University; M.D., State University of New York

JOHN A. MAIN (1971) *Associate Professor of Social Work*
B.F.A., University of New Mexico; M.S.W., D.S.W., University of Pennsylvania

ELI M. MANDELBAUM (1964) *Professor of Mathematics*
B.A., Temple University; M.A., Ph.D., University of Pennsylvania

JOHN A. MANGRAVITE (1976) *Professor of Chemistry*
B.S., St. Peter's College; Ph.D., University of New Hampshire

ROBERT J. MARBACH (1976) *Professor of Political Science*
B.A., LaSalle College; M.A., Ph.D., Temple University

KAREN L. MARKEY (1983) *Assistant Professor of Music Education*
B.S., M.Mus., West Chester University

ALICE B. MARKOW (1963) *Professor of English*
A.B., University of Delaware, A.M., University of Maryland, Ph.D., University of Pennsylvania

CAROL R. MATZ (1973) *Assistant Professor of Nursing*
B.S., Albright College; M.S., University of Maryland

GEORGE W. MAXIM (1972) *Professor of Childhood Studies and Reading*
B.S., M.Ed., Mansfield University; Ph.D., Pennsylvania State University

SUSAN MAXWELL (1969) *Associate Professor of Communicative Disorders*
B.A., Whittier College; M.A., Ohio University

GUSTAVE N. MBUY (1985) *Assistant Professor of Biology*
B.A., University of California; M.M., Ph.D., University of Cincinnati

ALBERTA M. McAFEE (1970) *Assistant Professor of Library Services*
B.S., Kutztown University, M.S.L.S., Drexel University

CHRISTINA WOLCOTT McCAWLEY (1971) *Assistant Professor of Library Services*
B.A., Ohio Wesleyan University, M.S.L.S., Catholic University of America; Ph.D., Drexel University

DWIGHT L. McCAWLEY (1971) *Associate Professor of English*
B.A., M.A., University of Tennessee; Ph.D., University of Illinois

RUTH L. McCOACH (1969) *Instructor of Speech Communication and Theatre*
B.S., West Chester University

MARY McCULLOUGH (1977) *Assistant Professor of Speech Communication and Theatre*
B.A., Millersville University, M.S.W., University of North Carolina

BANNATYNE McCUTCHEON (1974) *Assistant Professor of Social Work*
B.A., Upsala College; M.S.W., Rutgers School of Social Work

LYNETTE F. McGRATH (1968) *Professor of English and Women's Studies*
B.A., University of Sydney; B.A., M.A., Ph.D., University of Illinois

LARRY McKENNA (1986) *Instructor of Instrumental Music*

DAVID E. McKENTY (1961) *Professor of English*
B.S., Temple University; M.A., Ph.D., University of Pennsylvania

JAMES E. McVOY (1979) *Associate Professor of Music Theory and Composition*
B.M., Syracuse University; M.M., Ph.D., Eastman School of Music

ROBERT S. MEANS (1971) *Professor of Psychology*
B.A., M.A., Ph.D., University of Alabama

LAUREN B. MEISWINKEL (1967) *Associate Professor of Communication and Theatre*
B.S., Pennsylvania State University; B.D., Drew University, School of Theology; M.A. (History), M.A. (Rhetoric Public Address), Temple University; D.Min. (Theology), Drew University, School of Theology

RICHARD C. MERRELL (1968) *Chairperson, Department of Music Education; Professor*
B.S., West Chester University; M.Mus., Eastman School of Music; Ed.D., Pennsylvania State University

WAYNE O. MERRITT (1985) *Assistant Professor of Speech Communication and Theatre*
B.A., University of Maine, M.F.A., Case Western Reserve University

HAROLD W. METZ (1977) *Associate Professor of Criminal Justice*
A.B., Glenville State College; M.Ed., Ohio University; Ed.D., West Virginia University

ELAINE R. MILITO (1981) *Associate Professor of Mathematical Sciences*
B.S., S.U.N.Y. at Stony Brook; M.A., C.U.N.Y. Queens College; Ph.D., Pennsylvania State University

FRANK E. MILLIMAN (1960) *Assistant Chairperson, Department of Mathematical Sciences; Associate Professor*
B.N.S., College of Holy Cross; A.B., Hobart College; A.M., Columbia University

JAMES S. MILNE (1969) *Professor of Political Science*
B.S., Kutztown University; M.A., Villanova University; Ph.D., Temple University

DANIEL MOHAN (1980) *Chairperson, Department of Economics; Associate Professor*
B.S., B.A., Monmouth College; M.B.A., Bucknell University; M.A., Ph.D., Rutgers — The State University

DIMITRI I. MONOS (1978) *Associate Professor of Sociology*
B.A., University of Maryland, M.A., Ph.D., University of Pennsylvania

MICHAEL MONTEMURO (1965) *Professor of Mathematics*
B.A., LaSalle College, M.A., Ed.D., Temple University

SAMUEL F. MOORE (1979) *Associate Professor of Psychology*
B.A., Youngstown State College; M.A., Ph.D., University of Cincinnati

MICHAEL J. MORAN (1981) *Assistant Professor of Chemistry*
B.S., St. Joseph's College; Ph.D., University of Pennsylvania

JOHN R. MORGAN (1984) *Associate Professor of Business Administration*
B.A., Hampton Institute; M.B.A., Ph.D., Temple University

RONNIE L. MORGAN (1973) *Associate Professor of Mathematics*
B.S., Southwest Missouri State University; Ph.D., University of Missouri

WALENA C. MORSE (1968) *Professor of Psychology*
A.B., Duke University; M.A., Ph.D., Bryn Mawr College

JOSEPH G. MOSER (1966) *Associate Professor of Mathematics*
B.S., Rose Polytechnic Institute; M.S., Purdue University

SHIRLEY A. MUNGER (1968) *Professor of Music Theory and Composition*
B.A., M.A., University of Washington, D.M.A., University of Southern California, Diploma in Piano, Conservatoire National de Musique (Paris)

MARTIN P. MURPHY (1966) *Associate Professor of Anthropology*
A.B., A.M., University of Michigan

STERLING E. MURRAY (1972) *Professor of Music History*
B.Mus., University of Maryland; A.M., Ph.D., University of Michigan

ROGER W. MUSTALISH (1978) *Associate Professor of Health, Director, Water Resources Center*
A.B., University of Pennsylvania; M.S., Michigan State University; M.P.H., Ph.D., University of Minnesota

KOSTAS MYRSIADES (1969) *Chairperson, Department of English; Professor*
B.A., University of Iowa, M.A., Ph.D., Indiana University

ALI NAGGAR (1977) *Professor of Accounting*
B.Com., Cairo University; M.B.A., Long Island University; Ph.D., University of Oklahoma

TAHANY NAGGAR (1977) *Associate Professor of Economics and Women's Studies*
B.Com., Rigadh University; M.A., Long Island University; Ph.D., University of Oklahoma

REGINALD NEALY (1986) *Assistant Professor of Criminal Justice*
A.A., Pennsylvania State Police Academy; B.S., Pennsylvania State University; M.S., Lincoln University

MARY E. NEHLIG (1967) *Assistant Director, Library Services; Associate Professor*
A.B., Wilson College; M.S.L.S., Drexel University

LARRY A. NELSON (1971) *Professor of Music Theory and Composition*
B.Mus., University of Denver; M.Mus., Southern Illinois University; Ph.D., Michigan State University

PATRICIA A. NESTER (1984) *Assistant Professor of Nursing*
B.S.N., M.S.N., Medical School of Georgia; Diploma in Nursing, Gastonia Memorial Hospital

JANA L. NESTLERODE (1986) *Assistant Professor of Criminal Justice*
B.A., Pennsylvania State University; J.D., Widener University

DEBORAH NICKLES (1969) *Chairperson, Department of Special Education; Assistant Professor*
B.S., West Chester University; M.S., Syracuse University

ELIZABETH NOLLEN (1986) *Instructor of English*
B.A., Ohio University; M.A., Ph.D., Indiana University

ISAAC B. NORRIS (1986) *Instructor of Physical Education*
B.S., West Chester University; M.A., University of Maryland

DOROTHY R. NOWACK (1979) *Professor of Health*
B.S., Wheaton College, R.N., Swedish Covenant School of Nursing; M.Ed., Lehigh University; Ph.D., University of Maryland

ROBERT P. NYE (1968) *Professor of Health*
A.B., Gettysburg College; M.Ed., West Chester University; Ed.D., Temple University

BERNARD S. OLDSEY (1969) *Professor of English*
B.A., M.A., Ph.D., Pennsylvania State University

C. JACK ORR (1986) *Associate Professor of Speech Communication and Theatre*
B.A., Messiah College, B.D., Eastern Baptist Theological Seminary; M.A., Northwestern University; Ph.D., Temple University

REYNOLD D. PAGANELLI (1967) *Associate Professor of Counselor, Secondary, and Professional Education*
B.S., Bloomsburg University; M.A., Catholic University of America, C.A.S., Johns Hopkins University

CHARLES W. PAGANO (1967) *Assistant Professor of Physical Education*
B.S., West Chester University; M.Ed., Ohio University

WILLIE E. PAGE, JR. (1967) *Associate Professor of English*
A.B., East Carolina University; M.A., Florida State University

PRAXITELES PANDEL (1972) *Chairperson, Department of Keyboard Music; Associate Professor*
B.Mus., M.S., The Juilliard School

SUSAN B. PARKINSON (1968) *Associate Professor of Physical Education*
B.S., Pennsylvania State University; M.Ed., West Chester University

DAVID W. PATTERSON (1982) *Associate Professor of Criminal Justice*
A.B., Newberry College; M.S., Ph.D., Florida State University

FREDERICK R. PATTON (1981)*Assistant Chairperson, Department of Foreign Languages, Assistant Professor*
B.A., M.Ed., Temple University; M.A., Ph.D., University of Pennsylvania

MICHAEL A. PEICH (1968) *Assistant Professor of English*
B.A., Wartburg College, M.A., University of Pennsylvania

ROBERT E. PENNINGTON (1966) *Professor of Keyboard Music*
B.Mus., M.Mus., Mus.D., Northwestern University

G. KING PERRY (1983) *Instructor of Mathematical Sciences*
B.S., M.Ed., Bloomsburg University

ERMINIO J. PETA (1967) *Professor of Childhood Studies and Reading*
B.S., Kutztown University; M.Ed., University of Florida; Ed.D., Lehigh University

ERNEST L. PETERS (1969) *Program Review Officer; Professor, Educational Services*
A.B., Lafayette College; M.A., Villanova University; Ed.D., University of Denver

WILLIAM B. PETERS (1973) *Associate Professor of History*
B.A., Pomona College; M.A., California State University, San Francisco; Ph.D., University of California, Santa Barbara

RUTH B. PETKOFSKY (1968) *Associate Professor of Childhood Studies and Reading*
A.B., Hunter College; M.A., University of Minnesota, Ed.D., Temple University

FREDERICK C. PFLIEGER (1961) *Professor of Music History*
B.S., West Chester University; M.Mus., Ph.D., West Virginia University

THOMAS W. PLATT (1968) *Professor of Philosophy*
B.A., Washington and Jefferson College, M.A., University of Pittsburgh; Ph.D., University of Pennsylvania

EDWARD I POLLAK (1977) *Assistant Chairperson, Department of Psychology; Professor*
B A , SUNY at Binghamton; M A , Ph.D., University of Connecticut

JACK PORTER (1968) *Professor of Psychology*
B S., M Ed., Ed D , Temple University

LOUIS H PORTER (1974) *Associate Professor of Psychology*
B A , Ohio University; M.A., Ph.D., Howard University

MARTHA A POTVIN (1985) *Assistant Professor of Biology*
B.S., University of Connecticut; M.S., Michigan State University; Ph.D., University of Nebraska

WILLIAM G PRATER (1969) *Associate Professor of English*
B.S., East Stroudsburg University; M.A , Pennsylvania State University; Ph D., Ohio University

GARY PRESSLEY (1985) *Instructor of Speech Communication and Theatre*
B.A , M.A., Temple University

SANDRA F. PRITCHARD (1967) *Chairperson, Department of Geology and Astronomy, Associate Professor*
B.S., M.Ed., West Chester University; Ph.D., University of Oregon

CAROL A. RADICH (1972) *Professor of Childhood Studies and Reading*
B A , Glassboro State College; M Ed., Ph.D., University of Maryland

WILLIAM J. RAHN (1965) *Chairperson, Department of Counselor, Secondary and Professional Education; Associate Professor*
B.S., Villanova University; M.Ed., Temple University

WILLIAM J. RAMPON (1967) *Associate Professor of Geography*
B S., Indiana University of Pennsylvania; M.A., University of Oklahoma

WILLIAM J. RARICK (1968) *Assistant Professor of Art*
B.A , Philadelphia College of Art; M.F.A., Tyler School of Art

JUDITH D. RAY (1978) *Assistant Professor of Physical Education*
A B.E. of Harris Teachers College; M.A Ed., Washington University

DAVID L. REDMOND (1963) *Associate Professor of Instructional Media*
B.S., West Chester University; M.S., Syracuse University

GEORGE F. REED (1966) *Professor of Astronomy*
B.S., St Joseph's University (Pa.); M.S., Ed D., University of Pennsylvania

THOMAS G. REED (1967) *Assistant Professor of Communication and Theatre*
B.S., West Chester University; Ph.D., Union of Experimental Colleges and Universities

HELEN R. REID (1975) *Assistant Professor of Chemistry*
B.A., B S , Texas Woman's University; Ph.D., University of New Orleans

RUSSELL E. REIS, JR. (1967) *Assistant Professor of Instructional Media*
B.S., M Ed., West Chester University

MARY ANN REISS (1969) *Assistant Professor of Foreign Languages*
B.A., Temple University; M.A., Villanova University

BARRY G. REMLEY (1968) *Assistant Professor of Physical Education*
B.S., M.Ed., West Chester University

ARLENE C. RENGERT (1976) *Director, School of Business and Public Affairs; Professor of Geography and Women's Studies*
A.B., University of Indiana, M.A , The Ohio State University; Ph D., University of Pennsylvania

JOEL M. RESSNER (1984) *Assistant Professor of Chemistry*
B.S., Lehigh University; M.Sc., University of Sussex; Ph D., Lehigh University

JANE K. RICHTER (1986) *Assistant Professor of Instrumental Music*
B.S., M.M., Temple University; D M.A , Combs College

RUSSELL K. RICKERT (1956) *Professor of Physics*
B.S., West Chester University; M.S., University of Delaware; Ed.D., New York University

DONN C. RILEY (1966) *Professor of History*
A B., M.A., Ph.D., St Louis University

ROBERT D. RIMEL (1966) *Assistant Professor of English*
B.S., West Chester University, M.A., University of Delaware

STANLEY RIUKAS (1968) *Professor of Philosophy*
A.B., Classical Gymnasium (Lithuania); Ph.B., Ph L., Loyola University; Ph.D , New York University

ALFRED D. ROBERTS (1959) *Professor of Foreign Languages*
B.A., Ursinus College; M.A , Ph.D., University of Pennsylvania

RONALD F. ROMIG (1967) *Professor of Biology*
B.S., Bloomsburg University; M Ed., Ph.D., University of Delaware

JOHN P. ROSSO (1975) *Instructor of Foreign Languages*
B.A., Haverford College, M.A , University of Pennsylvania

PHILIP B. RUDNICK (1968) *Director, Pre-Medical Program; Professor of Chemistry*
B.A., Yeshiva University; B.A., Ph D., Rutgers — The State University

C. RUTH SABOL (1986) *Assistant Professor of English*
B.Ed., M.Ed., Seattle University; Ph D., University of Wisconsin

ELBERT M. SADDLER (1985) *Assistant Professor of Library Services*
A.B., Rutgers University; M Ed., Ph.D., Temple University

JANE WESTON SADDORIS (1971) *Instructor of Communication and Theatre*
B.S., West Chester University; M.A., in Education, Villanova University

GLENN W SAMUELSON (1965) *Professor of Sociology*
B.A., Wheaton College, M.A.R., Eastern Baptist Theological Seminary; M A., Temple University; M.A., University of Pennsylvania; M.S., St Joseph's University; Ed.D., University of Maryland

BHIM SANDHU (1978) *Associate Professor of Political Science*
B.A , Panjab University (India); M.A., University of Texas; Ph.D , University of Missouri

HAROLD R. SANDS (1969) *Chairperson, Department of Psychology; Professor*
B A , Rutgers — The State University, M.Ed , Temple University; Ph.D., Pennsylvania State University

DEBORAH SANFORD (1986) *Instructor of Music Theory and Composition*
B.A., University of Pennsylvania, M M., D.M.A., Temple University

FRANK SAUERS (1986) *Instructor of English*
B.A., Villanova University; M.A., Purdue University; Ph D , University of Colorado

HARRY G. SCHALCK (1964) *Assistant Chairperson, Department of History; Professor*
A.B., Ursinus College; M A , Ph.D., Clark University

JUDITH A SCHEFFLER (1985) *Assistant Professor of English*
A B , Muhlenburg College; M A., Purdue University; M.A , Ph.D., University of Pennsylvania

ROBERT SCHICK (1961) *Professor of Keyboard Music*
B A , Swarthmore College; M.A., Columbia University; A.Mus.D., Eastman School of Music

STACEY SCHLAU (1985) *Assistant Professor of Foreign Languages*
B.A , M.A., Queens College; Ph.D., City University of New York

LISELOTTE M SCHMIDT (1970) *Chairperson, Department of Music History; Professor*
B Mus., Converse College, M A , New York University, M.Mus , Manhattan School of Music; Ed D , Columbia University, Fullbright Scholar (University of Munich, Germany, 1957-58)

R. GERALD SCHOELKOPF (1969) *Chairperson, Library Services; Assistant Professor*
B.A., Villanova University; M.S.L.S., McGill University

FRANCOISE E. SCHREMMER (1979) *Assistant Professor of Mathematics*
Propedeuitque de Mathematique, Maitrise de Mathematique, D.E.S., University of Paris; M.A., Ph.D., University of Pennsylvania

LEROY SCHUETTE (1973) *Advisor, Center for Academic Advising, Associate Professor, Educational Services*
B.A., Yankton College; M.A., University of Michigan, Ph.D , University of Utah

ANNE E. SELL (1978) *Assistant Professor of Nursing*
B.S.N., College Misericordia, M.S.N., Marquette University

RANI G SELVANATHAN (1986) *Associate Professor of Business Administration*
B.S., M.S., Ph.D., University of Delhi (India); Ph D., University of Paris (France)

GUS V SERMAS (1971) *Associate Professor of Art*
B A , Baylor University; B F.A , B.S., University of Texas, M F.A., University of Wisconsin

NEIL A SERPICO (1967) *Professor of Physical Education*
B.A., University of New Hampshire; Ed.M., Boston University; Ed.D., University of Alabama

ANNE SESSA (1968) *Professor of History and Women's Studies*
B A , Swarthmore College; Ph D., University of Delaware

WILLIAM H. SEYBOLD, JR. (1967) *Associate Professor of Mathematics*
B.S., Temple University; M.A., Northwestern University

LEIGH S. SHAFFER (1980) *Assistant Professor of Psychology*
B.S., M.S., Wichita State University; Ph.D., Pennsylvania State University

BERNICE SHAPIRO (1969) *Assistant Professor of Art*
Certificate, Cooper Union School of Architecture; B.F.A., Philadelphia College of Art; M.Ed., Tyler School of Art

JOHN C. SHEA (1967) *Professor of Political Science*
B.A., Allegheny College; M.A., University of Pennsylvania; Ph.D., University of Pittsburgh

MAURA J. SHEEHAN (1980) *Assistant Professor of Health*
B.S., Lowell Technological Institute; M.S., University of Lowell; Sc. D., University of Pittsburgh

JANE E. SHEPPARD (1953) *Associate Professor of Vocal and Choral Music*
B.Mus. Ed., Westminster College (Pa.); M.A., Columbia University; M.Mus., Indiana University

ROBERT R. SHINEHOUSE (1966) *Associate Professor of Psychology*
B.S., Ursinus College; M.A., Temple University

IRENE G. SHUR (1956) *Professor of History*
B.S., Ohio State University; M.Ed., University of Delaware; Ed.D., University of Pennsylvania

JAY SILVERMAN (1977) *Associate Professor of Counselor, Secondary, and Professional Education*
A.B., University of Chicago; Ph.D., New York University

CAROLYN G. SIMMENDINGER (1958) *Associate Professor of Art*
B.S., Kutztown University; M.F.A., Tyler School of Art

ELEANOR B. SINCLAIR (1970) *Assistant Professor of Library Services*
B.A., University of Delaware; M.L.S., Rutgers — The State University

IRA C. SINGLETON (1970) *Professor of Music Education*
B.S., West Chester University; Ed.M., Temple University; Ph.D., New York University

ANN R. SKEATH (1983) *Instructor of Mathematics*
B.S., Ursinus College; M.A., University of Illinois

HAROLD L. SKELTON (1968) *Chairperson, Department of Physics; Associate Professor*
B.S., Case Institute of Technology; M.S., University of Delaware; Ph.D., University of Delaware

SUSAN SLANINKA (1975) *Chairperson, Department of Nursing, Associate Professor*
B.S.N., Villanova University; M.S.N., University of Pennsylvania

ARTHUR R. SMITH (1984) *Assistant Professor of Geology and Astronomy*
A.B., M.S., Ed.D., University of Pennsylvania

CARL M. SMITH (1971) *Assistant Professor of Accounting*
B.B.A., M.B.A., Temple University; C.P.A., Commonwealth of Pennsylvania

EDWARD D. SMITH (1972) *Professor of Psychology*
B.S., Shippensburg University; M.Ed., Ed.D., Pennsylvania State University

ELIZABETH SMITH (1967) *Associate Professor of English*
B.A., Blue Mountain College; M.S., University of Southern Mississippi

FRANK A. SMITH (1964) *Professor of Physics*
B.S., Villanova University; M.A., Ed.D., Temple University

JAMES G. SMITH (1980) *Associate Professor of Political Science*
B.A., Oklahoma State University; M.A., University of California; Ph.D., Indiana University at Bloomington

LIDA NELSON SMITH (1966) *Assistant Professor of Physical Education*
A.B., Bard College; M.A., Sarah Lawrence College

PAUL K. SMITH (1985) *Assistant Professor of Physical Education*
B.S., M.S., Florida State University; Ph.D., Southern Illinois University

PHILIP D. SMITH, JR. (1967) *Acting Assistant Dean, Graduate Studies and Sponsored Research, Professor of Foreign Languages*
B.A., Pepperdine University; M.A., University of Nevada; Ph.D., Ohio State University

NORBERT C. SOLDON (1963) *Assistant Chairperson, Department of History; Professor*
B.A., M.A., Pennsylvania State University; Ph.D., University of Delaware

H. LEE SOUTHALL (1967) *Associate Professor of Instrumental Music*
B.S., West Chester University; M.A., Trenton State College

JOSEPH M. SPIECKER (1968) *Chairperson, Department of Instructional Media; Professor*
B.S., West Chester University; Ed.M., Temple University; Ed.D., Nova University

THOMAS W. SPIERLING (1972) *Psychologist, Counseling Center, Professor*
B.A., M.A., Ph.D., Michigan State University

CHARLES A. SPRENKLE (1955) *Professor of Keyboard Music*
B.S., Johns Hopkins University; B.Mus., M.Mus., D.Mus.A., Peabody Conservatory of Music

JACK STEINBERG (1978) *Associate Professor of Educational Services*
B.A., M.A., Temple University

JAY P. STEINMETZ (1967) *Assistant Professor of Instructional Media*
B.S., Millersville University; M.Ed., West Chester University

LESLIE STEVENSON, JR. (1972) *Psychologist, Counseling Center; Assistant Professor*
B.S., M.S., University of Utah

JOSEPH A. STIGORA (1973) *Assistant Professor of Communicative Disorders*
B.S., Bloomsburg University; M.A., Ph.D., Bowling Green University

PAUL STOLLER (1980) *Chairperson, Department of Anthropology and Sociology; Professor*
B.A., University of Pittsburgh; M.S., Georgetown University; Ph.D., University of Texas at Austin

CLEAVONNE STRATTON (1983) *Associate Professor of Communicative Disorders*
B.A., Miles College; M.A., Ph.D., Ohio State University

RICHARD L. STRAYER (1956) *Professor, Educational Services*
B.S., West Chester University; M.Ed., University of Delaware; Ed.D., Temple University

PAUL A. STREVELER (1970) *Professor of Philosophy*
B.A., St. John's University (Minnesota); Ph.D., University of Wisconsin

FREDERICK R. STRUCKMEYER (1966) *Professor of Philosophy*
B.A., King's College (N.Y.); A.M., Ph.D., Boston University

CHARLES H. STUART (1968) *Professor of History*
B.A., Houghton College; M.A., Bradley University; Ph.D., Boston University

ELENA F. STUART (1977) *Director, School of Health Sciences; Assistant Professor of Communicative Disorders*
B.A., Emerson College; M.S., Purdue University

JAMES D. SULLIVAN (1967) *Director, School of Music; Associate Professor of Music Theory and Composition*
B.S., West Chester University; M.A., Ph.D., Eastman School of Music

JANE B. SWAN (1965) *Professor of History and Women's Studies*
B.A., Swarthmore College; M.A., Ph.D., University of Pennsylvania

EMILY T. SWARTLEY (1970) *Assistant Professor of Instrumental Music*
B.Mus., Eastman School of Music; M.Mus., Temple University

ROY D. SWEET (1953) *Chairperson, Department of Vocal and Choral Music; Associate Professor*
B.S., State University of New York College at Fredonia; M.Mus., Eastman School of Music

JULIAN M. SWIREN (1964) *Assistant Chairperson; Department of Counselor, Secondary and Professional Education; Associate Professor of Counselor Education*
B.S., M.S., University of Pennsylvania; D.Ed., Pennsylvania State University

PATRICK J.M. SYLVESTER (1968) *Professor of Economics*
B.A., St. Francis Xavier University (Canada); M.A., University of New Brunswick (Canada); M.A., University of Pennsylvania; Ph.D., Bryn Mawr College

ROBERT J. SZABO (1974) *Associate Professor of Childhood Studies and Reading*
B.S., Kutztown University; M.Ed., Ed.D., Lehigh University

WACLAW SZYMANSKI (1985) *Associate Professor of Mathematical Sciences*
B.Sc., M.Sc., Jagiellonian University; D.Sc., Institute of Mathematics, Polish Academy of Science

JOHN C. TACHOVSKY (1970) *Associate Professor of Geography*
B.S., M.Ed., West Chester University; Ph.D., University of Cincinnati

JAMES A. TALAGA (1982) *Assistant Professor of Business Administration*
B.A., University of Illinois; M.A., Northern Illinois University; M.B.A., Temple University

BRADLEY E. TAYLOR (1973) *Assistant Professor of Physical Education*
B.S., M.Ed., Temple University

GLORIA A. TAYLOR (1983) *Instructor of Nursing*
B.S.N., Loyala University; M.S.N., University of Pennsylvania

M DARWOOD TAYLOR (1983) *Assistant Professor of Business Administration*
B S., University of Michigan; M B A , Stanford University

S KEITH TAYLOR (1968) *Professor of English*
B A., Ursinus College, M.A , University of Pennsylvania; Ed.D., Temple University

SANDRA J THIELZ (1973) *Assistant Professor of Physical Education*
B.S., Southern Connecticut State College, M Ed., West Chester University

GEORGE M THOMAS (1966) *Professor of Counselor, Secondary, and Professional Education*
B.S., West Chester University; M Ed., University of Delaware; Ed D., Temple University

WESLEY W. THOMAS (1979) *Associate Professor of Geography*
B.S., University of Maine, M S., West Chester University, Ph.D., University of Cincinnati

WILLIAM TOROP (1971) *Professor of Chemistry*
A B , M S., Ed D , University of Pennsylvania

THOMAS TREADWELL (1968) *Associate Professor of Psychology*
B.A., Morris Harvey College; M.S., University of Bridgeport; Moreno Institute, New York; (Certified Psychodramatist, T E.P.); Ed D., Temple University

JOHN N TREZISE (1969) *Assistant Chairperson, Department of Physical Education; Associate Professor*
B.S., West Chester University; M.Ed., University of Pittsburgh

ELISE A. TRIANO (1985) *Assistant Professor of Biology*
B.A , Gettysburg College; Ph D , Thomas Jefferson University

MILAN TRNKA (1962) *Assistant Professor of Physical Education*
A B , Syracuse University; M.S., University of Illinois

C. JAMES TROTMAN (1979) *Associate Professor of English*
B.A., M Ed , Pennsylvania State University; Ed D., Columbia University

EUGENIA R TRUESDELL (1969) *Associate Professor of Library Services*
A B., Elmira College; B.S., Syracuse University; M S.L.S , Drexel University

JOHN J. TURNER, JR (1965) *Professor of History*
A B., Muhlenberg College; M A , University of Rhode Island, Ph D., Columbia University

JOY VANDEVER (1964) *Associate Professor of Vocal and Choral Music*
B S , M.Ed , West Chester University

RICHARD K VELETA (1965) *Professor of Keyboard Music*
B Mus , M Mus , D Mus., Northwestern University

C. RALPH VERNO (1966) *Associate Professor of Mathematics*
B A , University of Pittsburgh, M Div , Westminster Theological Seminary, M S. in Ed , University of Pennsylvania

JOHN VILLELLA (1986) *Instructor of Instrumental Music*
B S , M M , West Chester University

JACQUES C. VOOIS (1969) *Associate Professor of Keyboard Music*
B Mus., Oberlin College; M.Mus., Manhattan School of Music, D.M A , Johns Hopkins University/Peabody Conservatory

EARL E. VOSS (1971) *Associate Professor of Health*
B.S., West Chester University, M.Ed , Temple University

JACK WABER (1976) *Chairperson, Department of Biology; Professor*
B.A., Hope College, Michigan, Ph D., University of Hawaii

G ALAN WAGNER (1967) *Associate Professor of Vocal and Choral Music*
B.Mus., Northwestern University; M F A., Carnegie-Mellon University

SHIRLEY ANN WALTERS (1963) *Director, School of Education, Professor of Counselor, Secondary, and Professional Education*
B.S., Millersville University; M.A , University of Michigan, D.Ed., Temple University

JOHN W WARD (1961) *Associate Professor of English*
A.B., M A., Miami University; Ph D., University of Delaware

JOHN W WEAVER (1973) *Chairperson, Department of Mathematical Sciences, Professor*
B.A , Eastern Mennonite College, M.A , University of Delaware, Ph D., Johns Hopkins University

CAROL WEBER (1982) *Associate Professor of Health*
B.S., Temple University, M.A., Ph.D., University of Maryland, M P H., Johns Hopkins School of Hygiene and Public Health

RICHARD J WEBSTER (1967) *Chairperson, Department of History; Professor of History, American Studies and Women's Studies*
A B , Lafayette College; M.A , University of Delaware, A.M , Ph D., University of Pennsylvania

RUTH J. WEIDNER (1967) *Associate Professor of Art*
B A , Hood College; M.S.L.S., Drexel University; M.A., University of Delaware

LOUIS F. WEISLOGEL (1970) *Associate Professor of Political Science*
A.B , Gettysburg College; M.S., Rutgers — The State University; M A., Villanova University; Ed.D., Nova University

MICHAEL S. WEISS (1978) *Professor of Communicative Disorders*
B A , Long Island University; M S., Ph.D., Purdue University

ROBERT H WEISS (1967) *Professor of English*
A B., University of Pennsylvania, A M., Ph.D., Temple University

JAMES R WELLS (1968) *Professor of Music Education*
B S., West Chester University; Ed M , Temple University; Ed D., Columbia University

THEODORA L. WEST (1963) *Professor of English*
B.A., University of Akron; M.A., Ohio State University; Ph D , University of Pittsburgh

LINWOOD J WHITE (1968) *Chairperson, Department of Art; Associate Professor*
B F.A , Maryland Institute College of Art, M F.A , University of Pennsylvania

W BENJAMIN WHITTEN (1959) *Associate Professor of Keyboard Music*
B.Mus., M Mus., Peabody Conservatory of Music

MARK F. WIENER (1965) *Assistant Professor of Mathematics*
B S , West Chester University; A.M , University of Illinois

HARRY WILKINSON (1948) *Chairperson, Department of Music Theory and Composition; Professor*
B.S., M.Ed , Temple University; Ph.D., Eastman School of Music

LLOYD C. WILKINSON (1960) *Associate Professor of Physical Education*
B.S., West Chester University; M.A , Villanova University

EDWIN L. WILLIAMS (1968) *Associate Professor of Philosophy*
B.A , West Chester University

JEROME M WILLIAMS (1985) *Assistant Professor of Foreign Languages*
B.A , Haverford College; M A., M.Phil., Ph.D., Yale University

LOIS M. WILLIAMS (1955) *Associate Professor of Vocal and Choral Music*
B.Mus., Western Michigan University; M.A., Columbia University; Fulbright Scholar (Germany 1953-1955)

JOHN M. WINTERMUTE (1966) *Associate Professor of Physical Education*
B.S., Ithaca College; Ed M , State University of New York at Buffalo

JACK E. WISE (1968) *Associate Professor of English*
B S., M Ed., Shippensburg University

C. GIL WISWALL (1985) *Assistant Professor of Geology and Astronomy*
B.A., Colgate University; M.S., Ph D , University of Montana

PHILIP WITONSKY (1974) *Associate Professor of Chemistry*
B.S., Queens College, Ph.D., University of Minnesota

MICHELE B. WOLFE (1983) *Assistant Professor of Library Services*
B.S., University of Connecticut; M.L.S., Southern Connecticut State College

PAUL WOLFSON (1978) *Associate Professor of Mathematics*
A.B., Columbia University; M.S., Ph.D., University of Chicago

RICHARD I. WOODRUFF (1966) *Professor of Biology*
B.S., Ursinus College; M Ed., West Chester University; Ph.D., University of Pennsylvania

JOHN WYLIE (1986) *Instructor of Music Education*
B.S., M.Ed., West Chester University

DANIEL J YEH (1968) *Associate Professor of Library Services*
B.A , National Taiwan University; M.S.L.S., Drexel University

RICHARD B YODER (1962) *Director of Athletics; Associate Professor of Physical Education*
B.S., West Chester University; M.A., Villanova University

FRANKLIN YOUNG (1985) *Chairperson, Department of Health; Professor*
A B , Mercer University; B.S.A., M.Agr , Ph.D., University of Florida

ROBERT J YOUNG (1965) *Professor of History*
B.S., Temple University; M.A., Ph.D., University of Pennsylvania

CARLOS R ZIEGLER (1969) *Professor of Childhood Studies and Reading*
A.B., Elizabethtown College; M.Ed , Ed D., Temple University

ELSIE B ZIEGLER (1965) *Professor of English*
B.S., Elizabethtown College; M.S.L., Villanova University, Ed.D., Temple University

CORNELIA A. ZIMMERMANN (1977) *Associate Professor of Childhood Studies and Reading*
B.S., Kutztown University; M Ed., Ed.D., Lehigh University

MARTIN ZLOTOWSKI (1973) *Associate Professor of Special Education*
A.B , New York University; M.A., Ph.D., Michigan State University

## Adjunct Faculty

JOHN D'ANGELO *Department of Health*
A.S., Philadelphia Community College; B.S., Philadelphia College of Textiles and Sciences

PATRICK DORRIS *Department of Health*
A.S., Philadelphia Community College; B.S., Allentown College; M.B.A , LaSalle University

N. BLAIR LEROY *Department of Health*
B.A , Yale University; M.D., Cornell University Medical College

RICHARD A McCLEAN *Department of Biology*
B.S., Iowa Wesleyan, M.A., Harvard University; Ph.D., Bryn Mawr College

YVONNE JO ROBBINS *Department of Health*
B.S.W , Temple University; A.S., Hahnemann Medical College

EDWARD THEURKAUF *Department of Health*
B.S., Princeton University; M.D Columbia College of Physicians and Surgeons

JACK C. WHITE *Department of Biology*
B.S., M.D., University of Vermont, F.A.C.S

## Emeriti

BERNICE BERNATZ, *Dean of Women Emerita*
JOHN W. CLOKEY, *Dean of Arts and Letters Emeritus*
W. GLENN KILLINGER, *Dean of Men Emeritus*
EMIL MESSIKOMER, *Dean Emeritus*
LLOYD C. MITCHELL, *Dean of Music Emeritus*
BYRON Y FLECK, *Dean of Social Sciences Emeritus*
ALEXANDER ANTONOWICH, *Music Education*
DOROTHY D. BAILEY, *English*
MARY M. BLISS, *Biology*
JUSTO B BRAVO, *Chemistry*
BARBARA J COATES, *Physical Education*
FAYE A. COLLICOTT, *Librarian*
GERALDINE C. CONBEER, *Librarian*
EDWIN B. COTTRELL, *Health and Physcial Education*
GEORGE CRESSMAN, *Education*
KATHERINE M. DENWORTH, *Education*
MARK M EVANS, *Director of Student Teaching*
RUTH FELDMAN, *Psychology*
CHARLOTTE M GOOD, *Education*
THELMA J. GREENWOOD, *Biology*
H. THEODORE HALLMAN, *Art*
CHARLOTTE E. KING, *Childhood Studies and Reading*
MARY L. KLINE, *Nursing*
CARRIE C. KULP, *Education*
GEORGE L. J. LANGDON, *Government and Planning (Geography)*
MURIEL LEACH, *Health and Physical Education*
JACK A. OWENS, *Health and Physical Education*
N RUTH REED, *Health*
B. PAUL ROSS, *Education*
W CLYDE SKILLEN, *Biology*
RUSSELL L. STURZEBECKER, *Health and Physical Education*
ELINOR Z. TAYLOR, *Physical Education*
JOSEPH M. THORSON, *Business Administration*
EDWARD T. TWARDOWSKI, *Health and Physical Education*
S. ELIZABETH TYSON, *English*
EARLE C. WATERS, *Health and Physical Education*
SOL WEISS, *Mathematical Sciences*
JAMES J WRIGHT, *Music Theory and Composition*

# Awards

## Trustees Achievement Awards

1985

FRANK GROSSHANS
CHARLES C. SOUFAS, JR.

1986
RICHARD W. FIELDS

## Distinguished Teaching Chairs

1982-1983

FRANK A. SMITH
JANE B. SWAN

## Merit Awards

1982-1983

DIANE O. CASAGRANDE
MARY A KEETZ
JANE E. SHEPPARD
CHARLES H. STUART

1983-1984

ELIZABETH A. GIANGIULIO
KOSTAS MYRSIADES
LOIS WILLIAMS

1984-1985

FRANK E. MILLIMAN
RUTH J. WEIDNER

## Distinguished Faculty Awards

1974-1975

THOMAS A. EGAN, *Teaching*
E. RILEY HOLMAN, *Teaching*
MICHAEL A. PEICH, *Teaching*

1975-1976

WALTER E. BUECHELE, JR., *Service*
CARMELA L. CINQUINA, *Service*
PHILLIP B. DONLEY, *Service*
GEORGE W. MAXIM, *Teaching*
EDWARD N. NORRIS, *Service*
PHILIP D SMITH, JR., *Teaching*
WILLIAM TOROP, *Teaching*

1976-1977

ROBERT E. BYTNAR, *Service*
ANDREW E. DINNIMAN, *Service*
IRENE G. SHUR, *Teaching*
RUSSELL L. STURZEBECKER, *Service*

1977-1978

MARC L. DURAND and ROBERT F. FOERY, (Joint Project), *Service*
BERNARD S. OLDSEY, *Service*
GEORGE F. REED, *Teaching*
RICHARD I. WOODRUFF, *Teaching*

1978-1979

ROBERT E. CARLSON, *Service*
JOHN J. TURNER, JR , *Teaching*
C. RALPH VERNO, *Teaching*
ROBERT H. WEISS, *Service*

1979-1980

CAROLYN B KEEFE, *Teaching*
JOHN A. MANGRAVITE, *Teaching*
PHILIP D. SMITH, JR., *Service*
NORBERT C. SOLDON, *Service*

1980-1981

LOUIS A. CASCIATO, *Teaching*
PHILIP B. RUDNICK, *Service*
FRANK A SMITH, JR , *Teaching*
JANE B SWAN, *Teaching*
JOSEPH M THORSON, *Service*

# Index


—A—

Absence Policy, 35
Academic Advising Center, 7
Academic Advising, 33
Academic Calendar, Inside Back Cover
Academic Classification of Students, 33
Academic Development Program, 7
Academic Honors List, 36
Academic Level Requirements for GSL/PLUS/SLS, 18
Academic Policies, Exemption from, 38
Academic Policies and Procedures, 33-39
Academic Standards, 36-37
Acceptance Fee, 14
Accounting, 41-42
Accreditation, Inside Front Cover
Adding a Course, 34
Additional Housing Fee, 15
Address, Change of, 16
Administration, 123-124
Admission, 12-13
Admission to Teacher Education, 119
Adult and Continuing Education — See University College
Advanced Placement Program, 37
Affirmative Action Policy, Inside Front Cover
Afro-American Studies — See Ethnic Studies
Air Force ROTC, 42
Alumni Association, 30
American Studies, 43
Anthropology and Sociology, 44-46
Appeals to Fee and Refund Policies, 16
Application Fee, 14
Application for Admission, 12
Applied Media Technology — See Instructional Media
Army ROTC, 10, 92-93
Art, 46-49
Art Collections, 11
Associate Degrees, 32-33
Associate of Science — See Health and Instructional Media
Astronomy — See Geology and Astronomy
Athlete Absence Policy, 35
Athletic Training — See Physical Education
Athletics, 27
Auditing Fee, 15
Auditing Privileges, 34
Awards — See Scholarships and Awards

—B—

Basic Fees, 13-14
Biology, 49-51
Black Student Union, 28
Bookstore, 25
Budget, Sample, 17
Business Administration, 51-53

—C—

Calendar, Academic, Inside Back Cover
Campus, Description of, 10
Campus Map, 2
Career Planning and Placement Services, 25
Center for Academic Excellence, 7
Center for Governmental and Community Affairs, 12
Certification, Admission for, 120
Certification, Teaching, 119, 120
Certification Fee, 15
Change of Address, 16
Changing Majors, 33
Chemistry, 53-55
Chemistry-Biology — See Biology, Chemistry, Pre-Medical Program
Chemistry-Geology — See Geology and Astronomy
Childhood Studies and Reading, 55-58
Class Load, 33
Classification by University Program, 33
Classification of Students, 23
CLEP, 37-38
Closing, Storm, Policy for, 25
Coaching — See Physical Education
College Level Examination Program (CLEP), 37-38
Communication — See Speech Communication & Theatre
Communication Club, 27
Communications Directory, Inside Front Cover
Communicative Disorders, 58-59
Community Center Fee, 14
Comparative Literature Studies, 59-60 — See also English
Computer Science — See Mathematical Sciences
Computing Services, 10-11
Continuing Education Programs — See University College
Correspondence Courses Policy, 37
Counseling Center, 25
Counselor, Secondary, and Professional Education, 60-62
Course Prefixes, Guide to, 40-41
Credit By Examination, 34
Fee, 14
Criminal Justice, 62-63
Cumulative Grade Point Average, 36
Required for Graduation, 37
Cut Policy, 35

—D—

Damage Fee, 14-15
Dance — See Physical Education
Darlington Herbarium, 11
Deadline for Application, 12
Dean's List — See Academic Honors List
Deferred Payment Policy, 14
Degree Programs,
Graduate, 8-9
Undergraduate, 39-40
Degree Requirements, 30-33
See also Individual Program Listings
Delinquent Accounts, 16
Dental Hygiene — See Health
Description of the Campus, 10
Dining Accommodations, 24
Directions to the University, 6
Directory Information — Rights to Privacy Act of 1974, 38
Dishonored Check Fee, 15
Disabled Students, Office of Special Service to, 7
Dismissal, Academic, 36-37
Distributive Requirements, 31
Driver Education — See Physical Education
Dropping a Course, 34

—E—

Early Admission, 12
Early Childhood — See Childhood Studies and Reading
Earth Science — See Geology and Astronomy
Economics, 64-65
Elementary Education — See Childhood Studies and Reading
Emeriti, 134
Engineering — See Physics
English, 65-68
Enrollment, 5
Environmental Education, 61-62
Environmental Health — See Health
Ethnic Studies, 68-69
Evening Studies — See University College

Events, Scheduling of, 10
Exemption from Academic Policies, 38
Exemption from Finals, 35

—F—
Faculty, 125-134
Faculty Awards, 135
Fees and Expenses, 13-16
Film Theory and Criticism — See English
Final Examination, Exemption From, 35
Finance — See Economics
Financial Aid, 17-23
Financial Obligations, 14
Foreign Culture Clusters, 31-32
Foreign Language and Culture Requirements, 31-32
Foreign Languages, 69-74
Foreign Students, Admission of, 13
Forensics and Theatre, 27
Francis Harvey Green Library, 11
Fraternities, 29-30
Frederick Douglass Society, 28
French — See Foreign Languages

—G—
GI Bill, 9
General Education Requirements, 30-32
Geography — See Government and Planning
German — See Foreign Languages
Geology and Astronomy, 74-76
Government and Planning, 76-80
Governmental and Community Affairs, Center for, 12
Grade Changes, 36
Grade Reports, 35
Grading System, 35-36
Graduate Credit for Undergraduates, 34-35
Graduate Studies, 8-9
Graduation Fee, 15
Graduation Honors, 38
Graduation Requirements, 38
Grants — See Financial Aid
Greek — See Foreign Languages
Guaranteed Student Loan, 19
Gymnasium Uniforms, 16

—H—
Health, 80-83
Health and Physical Education — See Physical Education
Health Center, 24
Health Center Fee, 15
Hispanic-American Studies — See Ethnic Studies
Historical Properties, 11-12
History, 83-85
History of the University, 5
Holocaust Studies — See Ethnic Studies
Honor Societies, 28-29
Honors, Graduation, 38
Honors List, 36
Honors Program, 7, 85
Housing,
  Off-Campus, 24
  On-Campus, 23-24
Housing Fee, 14 — See also Additional Housing Fee
Housing Refunds, 16

—I—
Identification Cards, 16
IGA, 26
  Fee — See Student Services Inc. Fee
Independent Study, 34
Individual Instruction, 34
Infirmary — See University Health Center
Information Science — See Mathematical Sciences
Institute for Women, 28
Instructional Media, 86-87
Insurance Programs, 24
Intention to Graduate, Required Notice, 38
Interdisciplinary Programs, 87
Interdisciplinary Requirement, 31
International Education, 9
Internships, 7
Intracollegiate Governmental Association, 26
  Fee — See Student Services Inc. Fee
Italian — See Foreign Languages

—J—
Jewish-American Studies — See Ethnic Studies
Journalism — See English
Junior Year Abroad Program, 70 — See also International Education

—L—
Languages — See Foreign Languages
Late Registration Fee, 15
Latin — See Foreign Languages
Latin American Studies, 88
Legal Residence, Determination of, 16
Liberal Studies, 88
Library Cards, 16
Library, Francis Harvey Green, 11
Library, Music, 11
Linguistics, 89
Literature — See English
Loans, 19-20
Location of the University, 5

—M—
Major, Changing, 33
Management — See Business Administration
Map of the Campus, 2
Marketing — See Business Administration
Mathematical Sciences, 89-92
Meal Card Replacement Fee, 15
Meal Refunds, 16
Meals — See Dining Accommodations
Military Personnel, Residency Status for, 16
Military Science, 92-93
Minor Fields of Study, 33
Music, 93-98
Music Instruction Fees, 15
Music Library, 11
Musical Organizations, 26-27

—N—
National Student Exchange Program, 6
National Teacher Examination, 119
Non-Credit Courses — See University College
Non-Discrimination Policy, Inside Front Cover
Notice of Intention to Graduate, 38
Nurses, Special Costs for, 16
Nursing, 99-100

—O—
Off-Campus Association (OCSA), 26
Off-Campus Housing, 24
Off-Campus Students, 23
Office of Off-Campus Life, 26
On-Campus Housing, 23-24
Orientation — See UNI 101 The Student and the University
Overloads, 33-34
Overnight Guests, 24
Overseas Study, 6

—P—
Parent Loan for Undergraduate Students, 19
Parking Fee, 15
Pass-Fail Policy, 34
Payment of Fees, 14
Peace and Conflict Studies, 100-101
Pell Grant, 20
Perkins Loans Program, 19
Philosophy, 101-102
Philosophy of the University, 5
Physical Education, 103-108
Physical Examinations, 13, 24
Physical Fitness — See Physical Education
Physically Disabled Students, 13
Physics and Pre-Engineering, 108-109
Placement, 25

Planning — See Government and Planning
Political Science — See Government and Planning
Political Science/Public Administration — See Government and Planning
Portuguese — See Foreign Languages
Post Office, 24
Pre-Engineering, 6, 116
Pre-Law, 6
Pre-Medical Program, 6, 110
Pre-Theology, 6
Probation, 36
Professional Education Requirement, 60
Program Board, 30
Programs, Undergraduate, 39-40
Psychology, 110-112
Public Administration — See Government and Planning
Public Health — See Health
Public Transportation, 6
Publications and Radio, 27

—R—
Readmission of Dismissed Students, 37
Readmission of Former Students, 13
Recreation Outdoor Pursuits Education — See Physical Education
Recreational Services, 27
Refunds, 15
Religion — See Philosophy
Religious Organizations and Places of Worship, 27-28
Repeating Courses, 37
Requirements for Admission, 12
Requirements for Graduation, 38
Residence Hall Association, 26
Residency Status for Military Personnel, 16
Resident Credit Requirement, 38
Resident Students, 23
Respiratory Therapy — See Health
Retention Office, 7
Rights to Privacy Act, 38
Robert B. Gordon Natural Area for Environmental Studies, 11
ROC, 9-10
Room and Board — See Housing Fee
Room Assignments, 23-24
Room Reservation Fee, 14
Room Reservation Policy for Reinstated Students, 37
ROTC Programs, 9-10, 92-93
Russian — See Foreign Languages
Russian Studies, 112

—S—
Safety Education — See Physical Education
Satisfactory Academic Progress, 18
Scheduling of University Events, 10
Scholarships and Awards, 20-23
School Health — See Health
Second Degree, 13, 33
Secondary Education — See Counselor, Secondary and Professional Education
Service Fraternities and Organizations, 29
Sexual Harassment Policy — Inside Front Cover
Short Term Emergency Loan, 20
Snow Days — See Storm Closing Policy
Social Fraternities and Sororities, 29-30
Social Studies, 113
Social Work, 113-114
Sociology — See Anthropology and Sociology
Sororities, 29-30
Space Management and Calendar, 10
Spanish — See Foreign Languages
Special Collections — See Francis Harvey Green Library
Special Education, 115-116
Speech and Hearing Clinic, 25
Speech Communication and Theatre, 116-118
Speech Pathology — See Communicative Disorders
Sports — See Athletics
State Grants, 20
Storm Closing Policy, 25
Structure of the University, 39
Student Absence Policy, 35
Student Affairs, 23-30
Student Athlete Absence Policy, 35
Student Consumer Rights and Responsibilities, 19
Student Nurses Association of Pennsylvania (SNAP), 28
Student Services Inc. Fee, 15
Student Standards, 26
Student Teaching, 119
Study Skills Project, 7
Summer Sessions, 9
Supplemental Education Opportunity Grant, 20
Supplemental Loans for Students, 20
Sykes Union, 25

—T—
Taking Courses Off Campus, 37
Taking Courses Out of Sequence, 34
Teacher Education, Admission to, 119
Teaching Certificates, 119-120
Teaching Certification Programs, 119-120
Theatre — See Speech Communication & Theatre
Toxicology — See Chemistry
Transfer of Credit, 37
Transfer Students, 12
Transcript Fee, 15
Transcripts, 39
Tuition — See Fees and Expenses
Tutoring Center, 7

—U—
Undeclared Major Program, 120
Undergraduate Programs, 6, 39-40
UNI 101 — The Student and the University, 30
University College, 8
University Health Center, 24

—V—
Vehicle Regulations, 24
Veterans' Affairs, 9

—W—
West Chester, How to Reach, 6
Withdrawal/Enrollment Change and Aid, 18-19
Withdrawal from the University, 34
Withdrawal Procedure, 15
Women's Center, 7-8
Women's Studies, 120-121
Work Study Program, 19
Writing — See English
Writing Consultancy, 7
Writing Emphasis Courses, 31
Writing Program, 10

# ACADEMIC CALENDAR 1987-88

## FALL SEMESTER 1987

| | |
|---|---|
| September 7 | Labor Day—dormitories open |
| September 8 | Late Scheduling<br>Faculty Meetings per departmental announcements. |
| September 9 | Classes begin 8:00 A.M. |
| September 24 | * Rosh Hashanah |
| October 3 | * Yom Kippur |
| November 25 | Thanksgiving Recess begins at 5:00 P.M. (No evening classes) |
| November 30 | Thanksgiving Recess ends at 8:00 A.M |
| December 16–22 | Examination Period |
| December 19 | Commencement |
| December 23 | Fall semester ends |

## SPRING SEMESTER 1988

| | |
|---|---|
| January 19 | Classes begin 8:00 A.M. |
| March 25 | Spring Recess begins 5:00 P.M |
| April 4 | Spring Recess ends 8:00 A.M |
| May 6 | Reading Day, no classes |
| May 7–13 | Examination Period |
| May 14 | Commencement |
| May 14 | Spring Semester Ends |

## SUMMER SESSIONS 1988

| | |
|---|---|
| May 31–June 17 | Pre Session |
| June 20–July 29 | Regular Session |
| August 1–August 19 | Post Session |

*Although the University will be in session, no examinations are to be administered on these major Jewish Holy Days.

West Chester University
West Chester, Pennsylvania 19383

# This Summer... Come to West Chester

## Undergraduate courses 1988

# CALENDAR AND REGISTRATION INFORMATION
# UNDERGRADUATE SUMMER SESSIONS
# 1988

| 1988 APRIL 1988 | | | | | | |
|---|---|---|---|---|---|---|
| S | M | T | W | T | F | S |
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

| 1988 MAY 1988 | | | | | | |
|---|---|---|---|---|---|---|
| S | M | T | W | T | F | S |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

| 1988 JUNE 1988 | | | | | | |
|---|---|---|---|---|---|---|
| S | M | T | W | T | F | S |
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

| 1988 JULY 1988 | | | | | | |
|---|---|---|---|---|---|---|
| S | M | T | W | T | F | S |
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

| 1988 AUGUST 1988 | | | | | | |
|---|---|---|---|---|---|---|
| S | M | T | W | T | F | S |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | 31 | | | |

Scheduling and payment begin April 11 and continue until the termination date given below for each session. In-person and late registration take place in the Elsie O. Bull Center. If necessary, another person may register for you at late registration.

## PRE SESSION

| | |
|---|---|
| Beginning of Scheduling Period | Monday, April 11 |
| Deadline for Mail Scheduling and Payment | Friday, May 13 |
| Deadline for In-person Scheduling and Payment | Friday, May 20 |
| Late-Registration (In-person only) in the Office of the Registrar, Elsie O. Bull Center ($15.00 late fee) | Thursday, May 26 |
| 2:30–4:30 p.m. and 5:30–6:30 p.m. | |
| Classes begin 8:00 a.m. | Tuesday, May 31 |
| Classes end | Friday, June 17 |

## REGULAR SESSION

| | |
|---|---|
| Beginning of Scheduling Period | Monday, April 11 |
| Deadline for Mail Scheduling and Payment | Friday, June 3 |
| Deadline for In-person Scheduling and Payment | Friday, June 10 |
| Late Registration (In-person only) in the Office of the Registrar, Elsie O. Bull Center ($15.00 Late Fee) | Thursday, June 16 |
| 2:30–4:30 p.m. and 5:30–6:30 p.m. | |
| Classes begin 8:00 a.m. | Monday, June 20 |
| Holiday | Monday, July 4 |
| Classes end | Friday, July 29 |

## POST SESSION

| | |
|---|---|
| Beginning of Scheduling Period | Monday, April 11 |
| Deadline for Mail Scheduling and Payment | Friday, July 15 |
| Deadline for In-person Scheduling and Payment | Friday, July 22 |
| Late Registration (In-person only) in the Office of the Registrar, Elsie O. Bull Center ($15.00 Late Fee) | Thursday, July 28 |
| 1:30–3:30 p.m. | |
| Classes begin 8:00 a.m | Monday, August 1 |
| Classes end | Friday, August 19 |

## TELEPHONES (AREA CODE 215)

| | |
|---|---|
| Summer Sessions, Room 144, Elsie O. Bull Center | 436-2230 |
| Registrar, Room 154, Elsie O. Bull Center | 436-3541 |
| Office of the Bursar, Room 114, Elsie O. Bull Center | 436-2552 |

The Summer Sessions Office is open Monday through Friday, 8:00 a.m. to 4:00 p.m. The Office of the Registrar is open Monday through Friday 8:30 a.m to 3:30 p.m. The Office of the Bursar is open Monday through Friday 8:00 a.m. to 3:30 p.m.

# Welcome to West Chester!

West Chester's location is hard to beat! Situated in the rolling hills of Chester County just 25 miles west of downtown Philadelphia, it offers students many of the advantages of both the city and the countryside. Near such historical, cultural and recreational attractions as Independence Hall, Brandywine River Museum, Longwood Gardens, and Valley Forge Music Fair, West Chester is an ideal place to spend the summer.

## Convenient Shopping

Books, records, cards, clothes, handcrafts, sporting goods – everything the student could want or need is available from friendly, local merchants in shops within walking distance of the University. If bargain hunting is your specialty, join the bus trip to the Reading factory outlets sponsored by Recreational Services. For information on local shops, visit the West Chester Chamber of Commerce at 40 East Gay Street and pick up the Central West Chester Shopping Guide. For information on the trip to Reading, call (215) 436-2133.

## Great Food!

Whether you're looking for your favorite fast food restaurant, traditional Philadelphia cheesesteaks and hoagies, a candlelight gourmet dinner, or exotic foreign fare, chances are you'll find it in or near West Chester. Many of the area's favorite eating spots are described in the Restaurant and Entertaining Guide available from the Chester County Tourist Bureau, 117 West Gay Street, in downtown West Chester.

## Public Transportation

Philadelphia and many suburban communities are accessible by public transportation. Schedules and fare information are generally available in Sykes Union Building, at the Philips information desk, and by phone. For information on public transportation call (215) 734-1300. Rainbow cab provides taxi service in West Chester and the surrounding area. Call (215) 696-6060.

## Sports, Sports, Sports!

Watch the Philadelphia Eagles train right on the West Chester University campus from mid-July to August. See the team work out, get your favorite player's autograph, and watch a rookie scrimmage.

"Take me out to the ball game!" with a bus trip to a Phillies home game sponsored by Recreational Services. For more information call (215) 436-2133.

## Camping, Boating, Swimming, Hiking, Fishing and More

Chester County is fortunate to have two state parks and five county parks offering a full range of outdoor recreational activities. Camping and canoeing equipment may be rented from Recreational Services. For more information on nearby parks, visit the Chester County Tourist Bureau at 117 West Gay Street in downtown West Chester.

## About the University

West Chester University's 388-acre campus provides students with modern classrooms and laboratories, an excellent library and comfortable residence halls. The University is within walking distance of downtown West Chester and public transportation into Philadelphia.

During the regular academic year, West Chester University enrolls some 9,600 students in its undergraduate programs and 1,700 students in graduate programs. Students may pursue associate, baccalaureate, and master's degrees as well as enroll in a number of certification and other non-degree programs.

# General Information

## Housing

Housing on campus is available to summer students. Residence halls are conveniently located near both Lawrence Center, which houses the dining rooms, post office and many student services, and Sykes Union Building with the bookstore, game room and snack bar.

To apply for summer housing call or write to

Department of Residence Life
206 Sykes Union Building
West Chester University
West Chester, Pa. 19383
(215) 436-3305

Application should be received at least two weeks prior to the beginning of the session for which housing is desired

## Student Services

Summer students at West Chester University have available the same full range of services provided during the academic year.

**Career Development Center**, which provides career planning and placement services, is located on the second floor of Lawrence Center. For more information, call 436-2501.

**Counseling Center**, staffed by licensed psychologists, offers individual counseling for personal problem solving and other counseling services on a confidential basis. Come to the second floor of Lawrence Center or call 436-2301.

**Financial aid** is available to summer students in the form of work-study employment, student loans and student grants. Come to room 139, Elsie Bull O. Center or call 436-2627.

**University Health Center** provides first-aid and routine treatment of minor illnesses. Located in Ramsey Hall basement, the office is open Monday through Friday from 8:00 a.m. to Midnight. Summer students may take advantage of a group accident and health policy, approved by the University, which covers them for the 12

weeks of summer sessions. Call the University Health Center 436-2509, for information.

**Recreational Services** provides organized recreational activities for summer students and offers rental and loan of equipment for student use. There are trips scheduled to concerts, area points of interest and professional baseball games as well as on-campus activities such as intramural softball and volleyball. Campus facilities including the gymnasiums, pools, and tennis courts are open for informal recreational use. For additional information, call 436-2133.

### Important Notes

- ★ The times and days of classes are subject to change.
- ★ Each summer session offering is contingent upon adequate enrollment in the judgment of University administration.
- ★ The catalog is not to be regarded as an irrevocable contract between the student and West Chester University.
- ★ Admission to a summer session does not imply admission for the academic year.
- ★ Students may have other persons register for them.
- ★ Mail completed undergraduate Summer School registration materials to:
  Summer School Office
  144 E.O. Bull Center
  West Chester University
  West Chester, PA 19383
- ★ Students who require an undergraduate catalog for course descriptions for approval to transfer course credit should contact the Office of Admissions, (215) 436-3411. Course descriptions are also available from the departments offering the courses. (See inside back cover for listing.)

# Academic Information

## Accreditation

West Chester University is accredited by The Middle States Association of Colleges and Secondary Schools, The National Council for Accreditation of Teacher Education, The National Athletic Training Association, The National Association of Schools of Music, The Council on Social Work Education, The National League for Nursing, The Society for Public Health Education, The American Chemical Society, the Commission on Accreditation in Clinical Chemistry, and the Joint Review Committee for Respiratory Therapy Education. West Chester University has been given program approval by the Department of Education of the Commonwealth of Pennsylvania for the certification of teachers.

## How to Register

Enrollment for West Chester University Summer Sessions is a simple process of scheduling and payment which can be completed by mail or in person by meeting the scheduling/payment deadlines given in the Summer Sessions Calendar on the inside front cover. Students may schedule for any or all three summer sessions at the same time. The scheduling/registration process has been completed only when payment has been received by the University.

**STUDENTS MUST REGISTER FOR ALL COURSES IN ANY PROGRAM BY THE REGISTRATION DEADLINE FOR THE SESSION DURING WHICH THE COURSES BEGIN, EVEN FOR COURSES WHICH START ON DATES OTHER THAN THE THREE SESSION STARTING DATES AND WHICH RUN FOR IRREGULAR PERIODS.**

## Credits

During summer sessions credits are usually earned at the rate of one semester hour of credit for each week of class. A student who attends all three sessions may earn 12 credits.

## In-Person Registration

The scheduling and payment period begins in April and continues until the scheduling and payment deadlines for each session (see calendar). See the inside front cover for hours University Offices are open. Students should allow at least 30 minutes to complete the scheduling process.

Completed forms and payment must be received in the Office of the Bursar prior to the deadlines or the student will be charged a late fee.

## Registration Procedure

1. Obtain a scheduling form. If a scheduling information form is not attached to this catalog, get one from the Summer Sessions Office, Room 144, Elsie O. Bull Center.
2. Complete the scheduling form. Students from other colleges and high school students must have the signature of an appropriate official.
3. Return the completed scheduling form to the Summer Sessions Office for approval.
4. Your scheduling form will be processed by the Registrar's Office and a bill will be mailed to you several weeks prior to each session deadline date. The bill which you receive will confirm your registration as well as indicate where your class will be held.

NOTE

It is possible to change a course in the Office of Summer Sessions Sessions before the in-person scheduling deadline for a particular session. After that, no course changes may be made until the first day of classes.

## Mail Registration

To schedule by mail, call the Summer Sessions Office at 436-2230 and you will be sent the requested information. After returning the scheduling card to the Summer Sessions Office, by mail or in person, you will receive a bill in the mail which should be returned with payment to the Office of the Bursar (Elsie O. Bull Center 114)

by mail or in person, by the deadline dates of each session.

**REMEMBER:** Your bill confirms your registration and indicates where your class will be held.

## Late Registration

Late registration and payment take place in the Elsie O. Bull Center, at the corner of High Street and Rosedale Avenue. See inside front cover for dates.

## Course Changes

Course changes are made in the Office of the Registrar during the drop/add period.

After the deadline dates for mail and in-person registration, the drop/add periods are:

Pre Session: May 31, 1988
Regular Session: June 20 and 21, 1988
Post Session: August 1, 1988

Course changes may also be made before the scheduling deadline of a session.

## Dropping a Course

During the drop/add period of each session a student may drop a course, thereby receiving no grade, by filing a schedule change form in the Office of the Registrar during the drop/add period.

A grade of "W" will be entered on the academic record of any student who drops a course between June 1–6 for Pre Session, June 22–July 1 for Regular Session and August 2–8 for Post Session.

Students may drop a course June 7–10 for Pre Session, July 5–15 for Regular Session and August 9–12 for Post Session and receive a grade of WP or WF from their instructor, only if they have a compelling special reason or emergency.

A student who is doing passing work at the time of approved withdrawal receives a WP, which is not treated as a grade. A student who is failing receives a WF, computed as an F.

After the end of the WP/WF period, students will receive whatever grade the professor assigns (excluding WF, WP), but are not entitled to selectively withdraw from particular classes.

**STUDENTS WHO STOP ATTENDING CLASS AND FAIL TO DROP A COURSE OFFICIALLY CAN EXPECT TO RECEIVE A GRADE OF "F" FOR THE COURSE.**

Refer to "Fees and Expenses" for the refund policy and procedure.

## Summer Graduation

Students who expect to graduate in August, at the end of the summer sessions, should have come to the Office of the Registrar and filed a Graduation Application by February 1, 1988. August graduates may participate in the May Commencement exercises if they file their notice of intention to graduate by that date.

## University Regulations and Policies

The same regulations for student procedure and conduct that are in effect during the academic year are also in effect during summer sessions. Deadlines are adjusted appropriately.

Academic policies may be found in the Undergraduate Catalog.

## Summer School Overload Policy

The normal student load for summer sessions is 3 hours for Pre Session, 6 hours for Regular Session, and 3 hours for Post Session. Any exceptions to this rule must be approved by the chairperson of the department in which the student is majoring.

A student will not be allowed to enroll in more than 15 hours in any one summer nor be allowed more than one additional course per session. A student should not seek permission to carry an overload if his or her cumulative average is below 2.75. Exceptional situations will be reviewed by the associate vice president for academic affairs.

# Fees and Expenses

## Special Notes:

- ★ The fees listed below reflect charges as of the Spring Semester, 1988. For up-to-date information, contact the Office of the Bursar, (215) 436-2552.
- ★ FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE.
- ★ Each summer session offering is contingent upon adequate enrollment in the judgment of University administration.
- ★ All charges for a session must be paid by deadline payment dates or a late fee of $15.00 will be incurred.
- ★ Unless specified otherwise, fees are paid by check or money order payable to: West Chester University. Your check or money order serves as your receipt.
- ★ IN-STATE AND OUT-OF-STATE SUMMER STUDENTS PAY THE SAME BASIC FEE. This common basic fee is applicable to summer sessions only.

## Basic Fee

$76.00 per semester hour of credit or equivalent charge of 0-credit courses.

## Housing Fee

(Room and Meals)
Regular Session – $414.00
Pre or Post Session – $207.00
No reduction for absences of a few days
Private room: $22.00 extra per week

## Educational Service Fee

$5.00 per each summer session

## Music Instruction Fee

(Regular Session)
Piano, Organ, Instrument or Voice, two half-hour lessons per week – $45.00

## Pipe Organ for Practice

Regular Session – $12.00
Pre or Post Session – $6.00
No charge for piano for practice

## Rental of Band or Orchestral Instruments

Regular Session – $6.00
Pre or Post Session – $3.00

## Late Fee

A $15.00 late fee is charged to all students (1) who fail to schedule prior to the scheduling deadline for a session and fail to pay by the designated deadline for the session (those who both schedule and pay late), (2) who schedule properly but fail to pay by the designated deadline for the session (those who schedule on time but pay late).

See the Summer Sessions Calendar for scheduling deadlines and late registration days.

## Community Center Fee

$1.00 Pre and Post Sessions
$2.00 Regular Session

## Dishonored Check Fee

A fee of $25.00 is charged to accounts with a stopped payment check or check drawn for insufficient funds. The late registration fee of $15.00 also applies.

## Refunds

All refund requests must be made in writing during the appropriate session. Contact the Office of the Registrar, Elsie O. Bull Center.

Prior to and including the day of late registration for each session (Pre, Regular, and Post) students who completely withdraw for that session are entitled to a full refund. Students withdrawing after late registration, but before classes begin are entitled to a refund of all but $10.00.

Once classes begin, the following schedule is in effect:

### Pre and Post Sessions

| | | |
|---|---|---|
| Day 1 and 2 | = | 80% refund |
| Day 3 | = | 70% refund |
| Day 4 | = | 60% refund |
| Day 5 | = | 50% refund |
| Day 6 and thereafter | = | NO REFUND |

### Regular Session

| | | |
|---|---|---|
| Day 1–4 | = | 80% refund |
| Day 5 and 6 | = | 70% refund |
| Day 7 and 8 | = | 60% refund |
| Day 9 and 10 | = | 50% refund |
| Day 11 and thereafter | = | NO REFUND |

### Formula

During Pre and Post Sessions –
1 Day = 1 Week of Semester
During Regular Session –
2 Days = 1 Week of Semester

## EXPLANATION OF COURSE DESIGNATIONS

The courses in this catalog are identified in three parts: abbreviation, course number and section number.

Key to Section Numbers:

| | Abr. | Num | Sec. |
|---|---|---|---|
| Pre Session – 20 series | ART | 101 | 21 |
| Regular Session – 30 series | ART | 101 | 31 |
| Post Session – 40 series | ART | 101 | 41 |

Semester hours of credit are shown in parentheses. Room numbers (if available) follow the number of credits. Attributes (special conditions) are indicated by abbreviations shown in the key below. Building codes are shown after the key. Course descriptions are in the West Chester University Undergraduate Catalog. For additional information, consult the appropriate department.

# Pre Session Offerings

## Tuesday, May 31 through Friday, June 17

**Unless noted otherwise, classes meet Monday through Friday.**

**Classes which meet from 8:00 a.m. to 12:00 Noon have a break from 9:30 to 10:30 a.m.**

**Key**

| | |
|---|---|
| * | Meets General Education Requirements |
| W | Writing Emphasis |
| $ | Additional Fee Required |
| M | Majors Only |
| P | Permission of Instructor |
| I | Interdisciplinary |
| L | Individualized Learning System |

**Building Codes**

| | |
|---|---|
| A | Anderson Hall |
| B | Elsie O. Bull Center |
| BG | Bull Center Ground Floor |
| C | Schmucker Science Center |
| CASH | Coatesville |
| D | Lawrence Center |
| E | Special Education Building |
| EXTN | Exton |
| EGH | Ehinger Gym |
| F | Fine Arts Bldg. (Mitchell Hall) |
| G | Old Library |
| H | South Campus Field House |
| J | Ruby Jones Hall |
| JG | Ruby Jones Hall Ground Floor |
| K | Hollinger Field House |
| L | Green Library |
| M | Main Hall |
| MF | McCoy Farm (South Campus) |
| OCL | Off-Campus Location (Contact Dept.) |
| PML | Philips Memorial Library |
| PMB | Philips Memorial Ballroom |
| R | Recitation Hall |
| S | Swope Hall (Music Building) |
| SAU | Swope Auditorium |
| SIN | Swope Instrumental Room |
| TBA | To Be Announced |
| UPDY | Upper Darby |
| WA | Wayne Hall |

## ACCOUNTING

### 8 – 9:30 a.m.

ACC 301 21 INTERMEDIATE ACCOUNTING I
May 31 to July 8
(3.0) TBA

### 8 a.m. – 12 Noon

ACC 201 21 PRINCIPLES OF ACCOUNTING I
(3.0) TBA

ACC 201 22 PRINCIPLES OF ACCOUNTING I
(3.0) TBA

ACC 202 21 PRINCIPLES OF ACCOUNTING II
(3.0) TBA

ACC 403 21 FEDERAL TAXATION I
(3.0) TBA

### 6 – 9:30 p.m.

ACC 201 23 PRINCIPLES OF ACCOUNTING I
May 31 to July 8
Tuesday-Thursday TBA
(3.0)

ACC 202 22 PRINCIPLES OF ACCOUNTING II
May 31 to July 8
Monday-Wednesday TBA
(3.0)

ACC 303 21 COST ACCOUNTING I
May 31 to July 8
Monday-Wednesday TBA
(3.0)

ACC 401 21 AUDITING
May 31 to July 8
Tuesday-Thursday TBA
(3 0)

## ANTHROPOLOGY & SOCIOLOGY

### 8 a.m. – 12 Noon

SOC 200 21 INTRODUCTION TO SOCIOLOGY
(3 0) G 202 – *

### 6 – 9:30 p.m.

ANT 102 21 INTRODUCTION TO ANTHROPOLOGY: CULTURAL
Monday Thru Thursday G 203
(3 0) – *

SOC 200 22 INTRODUCTION TO SOCIOLOGY
Monday Thru Thursday G 202
(3 0) – *

## ART

### 8 a.m. – 12 Noon

ARH 101 21 LEARNING TO LOOK: FINE ARTS, ART
(3 0) F 201 – *

ART 105 21 ART WORKSHOP
(3 0) F 111 – *

ART 251 21 ART IN THE ELEMENTARY SCHOOL
(3 0) F 206 – *

### 5 – 9 p.m.

ART 231 21 CERAMICS I BASIC TECHNIQUES
Monday Thru Thursday F 103
(3 0) – *

ART 232 21 CERAMICS II: INTERMEDIATE TECHNIQUES
Monday Thru Thursday F 103
(3.0) – *

ART 331 21 CERAMICS III. ADVANCED TECHNIQUES
Monday Thru Thursday F 103
(3.0) – *

ART 332 21 CERAMICS: STUDIO PROBLEMS
Monday Thru Thursday F 103
(3.0) – *

ART 335 21 CERAMICS: INDEPENDENT PROJECTS
Monday Thru Thursday F 103
(3 0)

## ASTRONOMY

See Geology and Astronomy

## BIOLOGY

Internship in Biological Science (BIO409) and Special Problems in Biology (BIO491) are available by arrangement with the Biology Department

### 8 a.m. – 12 Noon

BIO 102 21 HUMANS & THE ENVIRONMENT
(3.0) C 205

BIO 214 21 INTRODUCTORY MICROBIOLOGY
Must take BIL214
(3 0) C 312

BIO 275 21 FIELD BOTANY
(3.0) C 305

### 8 a.m. – 12:30 p.m.

BIO 100 21 BASIC BIOLOGICAL SCIENCE
(3 0) C 100 – *

BIO 209 21 HUMAN ANATOMY
(4 0) C 317

### 12 Noon – 2 p.m.

BIL 214 21 INTRODUCTORY MICROBIOLOGY LAB
Must take BIO214
Monday-Tuesday-Wednesday
C 217
(1.0)

## BUSINESS ADMINISTRATION

### 8 a.m. – 12 Noon

MGT 301 21 PRINCIPLES OF MANAGEMENT
(3 0) TBA

MGT 334 21 LABOR RELATIONS
(3 0) TBA

MGT 405 21 BUSINESS POLICY & STRATEGY
(3 0) TBA – W

MKT 301 21 PRINCIPLES OF MARKETING
(3 0) TBA

MKT 321 21 SALESMANSHIP
(3.0) TBA

MKT 327 21 MARKETING MANAGEMENT
(3 0) TBA

### 6 – 9:30 p.m.

BLA 201 21 AMERICAN LEGAL SYSTEM
Monday Thru Thursday TBA
(3 0)

## CHEMISTRY

Laboratories are offered in General, Organic, and Analytical Chemistry. If you wish to take the laboratory, register for it separately, e.g., CHE 103-21 (3 credit lecture), CRL 103-21 (2 credit laboratory).

### TBA

CHE 410 21 ADVANCED INDEPENDENT STUDY OR RESEARCH
PERMISSION OF CHAIRPERSON
(3.0) TBA – M

CHE 450 21 INTERNSHIP IN CHEMISTRY
PERMISSION OF CHAIRPERSON
(3.0) TBA – M

CHE 450 22 INTERNSHIP IN CHEMISTRY
PERMISSION OF CHAIRPERSON
(5 0) TBA – M

### 8 – 10 a.m.

CHE 103 21 GENERAL CHEMISTRY I
MAY 31 TO JULY 1
(3 0) C 160 – *

CHE 321 21 ANALYTICAL CHEMISTRY I
MAY 31 TO JULY 1
(3 0) C 151

### 8 – 10:30 a.m.

CHE 231 21 ORGANIC CHEMISTRY I
MAY 31 TO JULY 1
(4 0) C 130

### 10 a.m. – 12 Noon

CHE 102 21 CONCEPTS OF CHEMISTRY
(3.0) C 151 – *

CHE 230 21 INTRODUCTION TO ORGANIC & BIOLOGICAL CHE
MAY 31 TO JULY 1
(3 0) C 160

### 12 Noon – 4 p.m.

CRL 103 21 EXPERIMENTAL GENERAL CHEMISTRY I (LAB)
MAY 31 TO JULY 1
Tuesday Thru Thursday C 340
(2.0)

CRL 232 21 EXPERIMENTAL ORGANIC CHEMISTRY II LAB
MAY 31 TO JUNE 23
Monday Thru Thursday C 361
(2 0)

CRL 321 21 ANALYTICAL CHEMISTRY I LAB
MAY 31 TO JULY 1
Tuesday Thru Thursday C 140
(2 0)

## CHILDHOOD STUDIES AND READING

### 8 a.m. – 12 Noon

EDE 332 21 TEACHING SOCIAL STUDIES IN ELEM SCHOOL
(3.0) A 105

### 4:30 – 8 p.m.

EDE 422 21 SEMINAR IN READING
Monday Thru Thursday A 112
(3.0) – P

### 6 – 9:30 p.m.

ECE 405 21 ADMIN & SUPERVISION OF EARLY CHILDHOOD
Monday Thru Thursday A 105
(3 0) – W

EDE 406 21 CLASSROOM MANAGEMENT
Monday Thru Thursday A 113
(3 0)

## COMMUNICATIVE DISORDERS

### 8 a.m. – 12 Noon

SPP 101 21 INTRODUCTION TO COMMUNICATIVE DISORDERS
This course is required for incoming transfer students. Without this course graduation can be delayed by up to one year
(3 0) WA 200

## COMPUTER SCIENCE

See Mathematical Sciences

## COUNSELOR, SECONDARY & PROFESSIONAL EDUCATION

### 8 a.m. – 12 Noon

EDF 100 21 SCHOOL & SOCIETY
(3 0) A 001
EDP 250 21 EDUCATIONAL PSYCHOLOGY
(3 0) A 101

### 1 – 4 p.m.

EDF 351 21 EVALUATION & MEASUREMENT
(3 0) A 001

### 6 – 9 p.m.

EDF 498 21 WORKSHOP IN EDUCATIONAL FOUNDATIONS
MAY 31 TO JUNE 17
Monday Thru Thursday A 121
(3 0)

## CRIMINAL JUSTICE

### TBA

CRJ 490 21 PRACTICUM
(3.0) TBA – MW
CRJ 490 22 PRACTICUM
(3 0) TBA – MW
CRJ 490 23 PRACTICUM
(3 0) TBA – MW
CRJ 490 24 PRACTICUM
(3 0) TBA – MW
CRJ 490 25 PRACTICUM
(3 0) TBA – MW

### 8 a.m. – 12 Noon

CRJ 312 21 WHITE COLLAR CRIME
(3 0) J 202

## ECONOMICS

### 8 a.m. – 12 Noon

BUS 400 21 BUSINESS INTERNSHIP
(3.0) TBA
ECO 101 21 PRINCIPLES OF ECONOMICS – SURVEY
(3 0) A 207 – *
ECO 111 21 PRINCIPLES OF ECONOMICS (MACRO)
(3.0) A 213 – *
ECO 112 21 PRINCIPLES OF ECONOMICS (MICRO)
(3 0) A 103 – *

### 9:30 – 11 a.m.

ECO 251 21 QUANTITATIVE BUSINESS ANALYSIS I
MAY 31 TO JULY 8
(3 0) A 212

### 6 – 10 p.m.

ECO 111 22 PRINCIPLES OF ECONOMICS (MACRO)
MAY 31 TO JULY 8
Monday-Wednesday A 213
(3 0) – *

## ENGLISH

### 8 a.m. – 12 Noon

CRW 202 21 CREATIVE WRITING I
(3 0) M 201 – W
ENG 120 21 EFFECTIVE WRITING I
(3.0) M 203 – *
LIT 165 21 INTRODUCTION TO LITERATURE
(3 0) M 212 – *W

### 6 – 9:45 p.m.

LIT 165 22 INTRODUCTION TO LITERATURE
Monday Thru Thursday M 212
(3 0) – *W

## FOREIGN LANGUAGES

### 8 – 9:45 a.m.

FRE 201 21 INTERMEDIATE FRENCH I (TRADITIONAL)
May 31 to July 1
(3 0) TBA
SPA 201 21 INTERMEDIATE SPANISH I
May 31 to July 1
(3 0) TBA

### 10 – 11:45 a.m.

FRE 101 21 ELEMENTARY FRENCH I (TRADITIONAL)
May 31 to July 1
(3 0) TBA
SPA 101 21 ELEMENTARY SPANISH I
May 31 to July 1
(3.0) TBA

## GEOGRAPHY

See Government and Planning

## GEOLOGY AND ASTRONOMY

### TBA

ESS 460 21 INTERNSHIP
APPROVAL OF CHAIRPERSON
(1.0) TBA – P
ESS 460 22 INTERNSHIP
APPROVAL OF CHAIRPERSON
(2.0) TBA – P
ESS 460 23 INTERNSHIP
APPROVAL OF CHAIRPERSON
(3 0) TBA – P

### 8 a.m. – 3p.m.

ESL 201 21 FUNDAMENTALS OF TECHNIQUES IN GEOLOGY
Prerequisite ESS101
(3 0) C 053 – P

### 6 – 9:30 p.m.

ESS 101 21 INTRODUCTION TO GEOLOGY
Monday Thru Thursday C 050
(3 0) – *
ESS 111 21 GENERAL ASTRONOMY
Monday Thru Thursday C 186
(3 0) – *
IND 201 21 UNIFIED SCIENCE I
Monday Thru Thursday C 151
(3 0) – *IW

## GOVERNMENT & PLANNING

### TBA

GEO 415 21 INTERNSHIP IN GEOGRAPHY & PLANNING
(3 0) TBA
PAD 412 21 INTERNSHIP IN PUBLIC ADMINISTRATION
(3 0) TBA
PSC 412 21 INTERNSHIP IN POLITICAL SCIENCE
(3 0) TBA

### 8 a.m. – 12 Noon

GEO 101 21 WORLD GEOGRAPHY
(3 0) J 204 – *
PSC 100 21 AMERICAN GOVERNMENT & POLITICS
(3 0) J 102 – *

## HEALTH

### TBA

HEA 257 21 RESPIRATORY PHYSIOLOGY
Given at Bryn Mawr Hospital
(2 0) OCL
HEA 421 21 PUBLIC HEALTH INTERNSHIP
(3 0) OCL – M
HEA 456 21 ENVIRONMENTAL HEALTH INTERNSHIP
(3.0) OCL – M
HEA 456 22 ENVIRONMENTAL HEALTH INTERNSHIP
(3.0) OCL – M

### 9 a.m. – 12 Noon

HEA 104 21 HUMAN SEXUALITY
(3 0) H 328
HEA 435 21 HEALTH WORKSHOP:EATING AND LIVING
(3 0) H 326

### 6 – 9:30 p.m.

HEA 100 21 DIMENSIONS OF WELLNESS
Monday Thru Thursday H 326
(3 0) – *
HEA 410 21 MENTAL HEALTH
Monday Thru Thursday H 327
(3 0)

## HISTORY

Independent Studies in History (HIS490), Internship in History (HIS450) and Field Studies in History (HIS460) may be scheduled with the permission of the chairperson.

### 8 a.m. – 12 Noon

HIS 100 21 MAINSTREAMS IN HISTORY
(3.0) M 303 – *
HIS 152 21 HISTORY OF UNITED STATES II
(3.0) M 313

## INSTRUCTIONAL MEDIA

### 8 a.m. – 12 Noon

EDM 300 21 INTRODUCTION TO INSTRUCTIONAL COMMUNICATION
(3 0) A 006

### 6 – 9:30 p.m.

EDM 405 21 THEORY OF MOTION PICTURE PRODUCTION
Monday Thru Thursday A 006
(3 0) – *

## MATHEMATICAL SCIENCES

### TBA

CSC 300 21 COOPERATIVE PROGRAMMING
Permission of Mr Edelman
(4 0) TBA

### 8 a.m. – 12 Noon

CSC 101 21 INTRODUCTION TO COMPUTERS
(3 0) A 013 – *
MAT 000 21 FUNDAMENTALS OF ALGEBRA
(3.0) A 117
MAT 101 21 MATHEMATICS FOR ELEMENTARY TEACHERS I
(3 0) A 111 – *
MAT 103 21 INTRODUCTION TO MATHEMATICS
(3 0) A 113 – *
MAT 105 21 COLLEGE ALGEBRA & TRIGONOMETRY
(3 0) A 115 – *
MAT 107 21 CALCULUS FOR BUSINESS I
(3.0) A 116 – *
MAT 141 21 CALCULUS I
(3 0) A 112 – *
MAT 161 21 APPLIED CALCULUS I
(4 0) A 102 – *
MAT 351 21 TEACHING MATHEMATICS IN ELEMENTARY SCHOOLS
(3 0) A 114

### 6 – 9:45 p.m.

CSC 101 22 INTRODUCTION TO COMPUTERS
Monday Thru Thursday A 013
(3 0) – *
CSC 350 21 COMPUTERS IN EDUCATION
Monday Thru Thursday A 011
(3 0)

## MUSIC: EDUCATION

### 8 – 11 a.m.

MUE 231 21 MUSIC FOR THE CLASSROOM TEACHER
(3 0) BG040

## MUSIC: HISTORY & LITERATURE

### 8 a.m. – 12 Noon

MHL 221 21 MUSIC HISTORY I
(3 0) S 003
MHL 222 21 MUSIC HISTORY II
(3.0) S 001

## PHILOSOPHY

### 8 a.m. – 12 Noon

PHI 101 21 INTRODUCTION TO PHILOSOPHY
(3.0) M 401 – *
PHI 180 21 INTRODUCTION TO ETHICS
(3 0) M 402 – *

### 6 – 9:30 p.m.

PHI 101 22 INTRODUCTION TO PHILOSOPHY
Monday Thru Thursday M 401
(3 0) – *

## PHYSICAL EDUCATION

### TBA

PED 435 21 PHYSICAL FITNESS SPECIALIST INTERNSHIP
PRIOR APPROVAL
(3 0) TBA – P
PED 491 21 STUDENT TEACHING (WOMEN)
PRIOR APPROVAL
(3 0) TBA – P

### 9 a.m. – 12 Noon

PED 257 21 PRINCIPLES & PRACTICES OF RECREATION
(3 0) H 225

### 9 a.m. – 1 p.m.

PED 498 21 PHYSICAL EDUCATION WORKSHOP
MAY 31 TO JUNE 3
PRACTICAL RELAXATION TECHNIQUES
(1 0) TBA
PED 498 22 PHYSICAL EDUCATION WORKSHOP
JUNE 6 TO JUNE 10
WKSP. DATA ANAL. SAS FOR EXERCISE & SPORT
(2.0) TBA
PED 498 23 PHYSICAL EDUCATION WORKSHOP
JUNE 13 TO JUNE 17
QUALITATIVE SKILL ANALYSIS
(2.0) TBA

### 9 a.m. – 3 p.m.

PED 410 21 THERAPEUT MODALITIES FOR ATHLET TRAINING
MAY 31 TO JULY 29
(3 0) H 226 – P
PED 410 22 THERAPEUT MODALITIES FOR ATHLET TRAINING
MAY 31 TO JULY 29
(3.0) H 226 – P
PED 411 21 THERAPEUTIC EXERCISE FOR ATHLET TRAINING
MAY 31 TO JULY 29
(3.0) H 226 – P
PED 411 22 THERAPEUTIC EXERCISE FOR ATHLET TRAINING
MAY 31 TO JULY 29
(3 0) H 226 – P
PED 412 21 PATHOLOGY FOR ATHLETIC TRAINING
MAY 31 TO JULY 29
(3 0) H 226 – P
PED 412 22 PATHOLOGY FOR ATHLETIC TRAINING
MAY 31 TO JULY 29
(3 0) H 226 – P
PED 413 21 ATHLETIC INJURY/ILLNESS EVALUATION
MAY 31 TO JULY 29
(2 0) H 227 – P
PED 413 22 ATHLETIC INJURY/ILLNESS EVALUATION
MAY 31 TO JULY 29
(2.0) H 227 – P
PEL 410 21 THERAPEUT MODALITIES (ATHLET TNG) LAB
MAY 31 TO JULY 29
(1 0) H 225 – P
PEL 410 22 THERAPEUT MODALITIES (ATHLET TNG) LAB
MAY 31 TO JULY 29
(1 0) H 225 – P
PEL 410 23 THERAPEUT MODALITIES (ATHLET TNG) LAB
MAY 31 TO JULY 29
(1.0) H 225 – P
PEL 411 21 THERAPEUT EXERCISE (ATHLET TNG) LAB
MAY 31 TO JULY 29
(1 0) H 227 – P
PEL 411 22 THERAPEUT EXERCISE (ATHLET TNG) LAB
MAY 31 TO JULY 29
(1 0) H 227 – P
PEL 411 23 THERAPEUT EXERCISE (ATHLET TNG) LAB
MAY 31 TO JULY 29
(1.0) H 227 – P

### 12:30 – 2:30 p.m.

PEA 106 21 CANOEING
(1 0) H 220 – *
PEA 128 21 TENNIS
(1.0) GYM 5 – *

### 4 – 7 p.m.

PED 140 21 LIFESAVING
(1 0) POOLCO

### 6 – 8 p.m.

PEA 112 21 HORSEMANSHIP
Monday Thru Thursday H 220
(1 0) – $*

### 6 – 10 p.m.

PED 355 21 ACCIDENT CAUSATION & PREVENTION
Monday Thru Thursday H 226
(3.0)
PED 361 21 KINESIOLOGY
Monday Thru Thursday H 332
(3 0)
PED 449 21 LEARNING ON THE MOVE
Monday Thru Thursday H 225
(3.0)

### 7 – 10 p.m.

PED 100 21 FOUNDATIONS OF PHYSICAL EDUCAT & SPORT
(2.0) H 222

## PHYSICS

### 8 a.m. – 12 Noon

PHY 100 21 ELEMENTS OF PHYSICAL SCIENCE
(3.0) C 260 – *

## POLITICAL SCIENCE

See Government and Planning

## PSYCHOLOGY

### 7 – 10 p.m.

PSY 490 21 TOPICAL SEMINAR IN PSYCHOLOGY
May 31 to June 30 Open to Graduate Students
Topic: Psychodrama
Tuesday Thru Thursday TBA
(3.0)

### 8 a.m. – 12 Noon

PSY 100 21 INTRODUCTION TO PSYCHOLOGY
(3.0) A 201 – *
PSY 363 21 PSYCHOLOGY OF LEARNING
(3.0) A 203
PSY 441 21 FIELD EXPERIENCE IN PSYCHOLOGY I
(3.0) A 206
PSY 442 21 FIELD EXPERIENCE IN PSYCHOLOGY II
(3.0) A 206

### 6 – 10 p.m.

PSY 100 22 INTRODUCTION TO PSYCHOLOGY
Monday Thru Thursday A 207
(3.0) – *

## SOCIOLOGY

See Anthropology & Sociology

## SPECIAL EDUCATION

### 8 a.m. – 12 Noon

EDA 101 21 PSYCHOLOGY OF THE MENTALLY HANDICAPPED
(3.0) E 101

## SPEECH COMMUNICATION & THEATRE

### TBA

SPC 399 21 DIRECTED STUDIES IN SPEECH COMMUNICATION
Approval of Chairperson Required
(3.0) TBA
SPC 400 21 INTERNSHIP IN SPEECH COMMUNICATION
Approval of Chairperson Required
(3.0) TBA
THA 399 21 DIRECTED STUDIES IN THEATRE
Approval of Chairperson Required
(3.0) TBA – *
THA 400 21 PROFESSIONAL APPRENTICESHIP
Approval of Chairperson Required
(3.0) TBA – *

### 8 a.m. – 12 Noon

SPC 101 21 SPEECH FUNDAMENTALS: INTERPERS COMMUNICATION
(3.0) M 413
SPC 403 21 PERSUASION
(3.0) M 418 – W

### 6:30 – 10 p.m.

SPC 117 21 INTRODUCTION TO RADIO-TV-FILM
Monday Thru Thursday M 418
(3.0)

# Regular Session Offerings

## Monday, June 20 through Friday, July 29

## Holiday – Monday, July 4

**Unless noted otherwise, classes meet Monday through Friday.**

Key

| | |
|---|---|
| * | Meets General Education Requirements |
| W | Writing Emphasis |
| $ | Additional Fee Required |
| M | Majors Only |
| P | Permission of Instructor |
| I | Interdisciplinary |
| L | Individualized Learning System |

Building Codes

| | |
|---|---|
| A | Anderson Hall |
| B | Elsie O. Bull Center |
| BG | Bull Center Ground Floor |
| C | Schmucker Science Center |
| CASH | Coatesville |
| D | Lawrence Center |
| E | Special Education Building |
| EXTN | Exton |
| EGH | Ehinger Gym |
| F | Fine Arts Bldg (Mitchell Hall) |
| G | Old Library |
| H | South Campus Field House |
| J | Ruby Jones Hall |
| JG | Ruby Jones Hall Ground Floor |
| K | Hollinger Field House |
| L | Green Library |
| M | Main Hall |
| MF | McCoy Farm (South Campus) |
| OCL | Off-Campus Location (Contact Dept.) |
| PML | Philips Memorial Library |
| PMB | Philips Memorial Ballroom |
| R | Recitation Hall |
| S | Swope Hall (Music Building) |
| SAU | Swope Auditorium |
| SIN | Swope Instrumental Room |
| TBA | To Be Announced |
| UPDY | Upper Darby |
| WA | Wayne Hall |

## ACCOUNTING

### 8 – 9:30 a.m.

ACC 302 31 INTERMEDIATE ACCOUNTING II
July 11 to August 19 (6 weeks)
(3.0) TBA

### 9:30 – 11 a.m.

ACC 202 31 PRINCIPLES OF ACCOUNTING II
(3.0) TBA

### 11 a.m. – 12:30 p.m.

ACC 201 31 PRINCIPLES OF ACCOUNTING I
(3.0) TBA

### 6 – 9:30 p.m.

ACC 201 32 PRINCIPLES OF ACCOUNTING I
July 11 to August 31
Monday-Wednesday TBA
(3.0)
ACC 202 32 PRINCIPLES OF ACCOUNTING II
July 11 to August 31
Tuesday-Thursday TBA
(3.0)
ACC 304 31 COST ACCOUNTING II
July 11 to August 31
Monday-Wednesday TBA
(3.0)
ACC 405 31 ADVANCED ACCOUNTING
July 11 to August 31
Tuesday-Thursday TBA
(3.0)

## ANTHROPOLOGY & SOCIOLOGY

### 8 – 9:30 a.m.

ANT 102 31 INTRODUCTION TO ANTHROPOLOGY CULTURAL
(3.0) G 101 – *
SOC 200 31 INTRODUCTION TO SOCIOLOGY
(3.0) G 203 – *
SOC 240 31 SOCIOLOGY OF THE FAMILY
(3.0) G 202 – *

### 9:30 – 11 a.m.

ANT 103 31 INTRODUCTION TO ANTHROPOLOGY: ARCHAEOLOGY
(3 0) G 101 – *
ANT 113 31 ARCHAEOLOGICAL FIELD TECHNIQUES
(3 0) G 101
ANT 360 31 HISTORICAL ARCHAEOLOGY
(3.0) G 101
ANT 410 31 INDEPENDENT STUDIES IN ANTHROPOLOGY
(1 0) G 101
SOC 200 32 INTRODUCTION TO SOCIOLOGY
(3 0) G 202 – *
SOC 353 31 JUVENILE DELINQUENCY
(3 0) G 203

## ART

### 8 – 9:30 a.m.

ARH 101 31 LEARNING TO LOOK: FINE ARTS, ART
(3 0) F 201 – *

### 9:30 – 11 a.m.

ART 106 31 BEGINNING DRAWING
(3 0) F 202 – *
ART 206 31 INTERMEDIATE DRAWING
(3 0) F 202 – *
ART 306 31 DRAWING III: LIFE DRAWING
(3 0) F 202 – *

### 11 a.m. – 12:30 p.m.

ART 216 31 BEGINNING PAINTING
(3 0) F 202 – *
ART 217 31 INTERMEDIATE PAINTING
(3 0) F 202 – *
ART 226 31 WATER COLOR I
(3.0) F 202 – *
ART 227 31 WATER COLOR II
(3 0) F 202 – *
ART 316 31 ADVANCED PAINTING
(3 0) F 202 – *
ART 317 31 PAINTING: STUDIO PROBLEMS
(3 0) F 202 – *
ART 318 31 PAINTING FROM LANDSCAPE: INDEPENDENT PROJ
(3.0) F 202 – *
ART 319 31 PAINTING FROM MASTERS: INDEPENDENT PROJE
(3 0) F 202 – *

### 5 – 9 p.m.

ART 231 31 CERAMICS I: BASIC TECHNIQUES
JUNE 20 TO JULY 7
Monday Thru Thursday F 103
(3 0) – *
ART 232 31 CERAMICS II INTERMEDIATE TECHNIQUES
JUNE 20 TO JULY 7
Monday Thru Thursday F 103
(3 0) – *
ART 331 31 CERAMICS III: ADVANCED TECHNIQUES
JUNE 20 TO JULY 7
Monday Thru Thursday F 103
(3.0) – *
ART 332 31 CERAMICS: STUDIO PROBLEMS
JUNE 20 TO JULY 7
Monday Thru Thursday F 103
(3.0) – *
ART 335 31 CERAMICS: INDEPENDENT PROJECTS
JUNE 20 TO JULY 7
Monday Thru Thursday F 103
(3 0)

## ASTRONOMY

See Geology & Astronomy

## BIOLOGY

Internship in Biological Science (BIO409) and Special Problems in Biology (BIO491) are available by arrangement with the Biology department

### 8 – 9:30 a.m.

BIO 100 31 BASIC BIOLOGICAL SCIENCE
(3.0) C 100 – *
BIO 309 31 HUMAN PHYSIOLOGY
(4 0) C 317

### 5 – 8 p.m.

BIO 456 31 VIROLOGY
Monday-Tuesday-Wednesday
C 317
(3.0)

## BUSINESS ADMINISTRATION

### 8 – 9:30 a.m.

MGT 301 31 PRINCIPLES OF MANAGEMENT
(3 0) TBA
MKT 327 31 MARKETING MANAGEMENT
(3.0) TBA

### 9:30 – 11 a.m.

BLA 201 31 AMERICAN LEGAL SYSTEM
(3 0) TBA
MGT 405 31 BUSINESS POLICY & STRATEGY
(3.0) TBA – W
MKT 301 31 PRINCIPLES OF MARKETING
(3 0) TBA

### 11 a.m. – 12:30 p.m.

MGT 303 31 PRODUCTION & OPERATIONS MANAGEMENT
(3.0) TBA
MKT 404 31 INTERNATIONAL MARKETING
(3 0) TBA

### 6 – 10 p.m.

MGT 101 31 INTRODUCTION TO BUSINESS
Monday-Wednesday TBA
(3.0)
MGT 301 32 PRINCIPLES OF MANAGEMENT
Monday-Wednesday TBA
(3 0)
MGT 401 31 ENTREPRENEURSHIP
Monday-Wednesday TBA
(3 0)
MGT 402 31 ORGANIZATION THEORY & BEHAVIOR
Monday-Wednesday, TBA
(3 0) – W
MGT 405 32 BUSINESS POLICY & STRATEGY
Tuesday-Thursday TBA
(3 0) – W
MKT 301 32 PRINCIPLES OF MARKETING
Tuesday-Thursday TBA
(3.0)
MKT 327 32 MARKETING MANAGEMENT
Tuesday-Thursday TBA
(3.0)

## CHEMISTRY

Laboratories are offered in General, Organic and Analytical Chemistry If you wish to take the laboratory, register for it separately, e g., CHE 103-21 (3 credit lecture), CRL 103-21 (2 credit laboratory).

### TBA

CHE 410 31 ADVANCED INDEPENDENT STUDY OR RESEARCH
PERMISSION OF CHAIRPERSON
(3 0) TBA – M
CHE 450 31 INTERNSHIP IN CHEMISTRY
PERMISSION OF CHAIRPERSON
(3 0) TBA – M
CHE 450 32 INTERNSHIP IN CHEMISTRY
PERMISSION OF CHAIRPERSON
(5 0) TBA – M
CHE 450 33 INTERNSHIP IN CHEMISTRY
PERMISSION OF CHAIRPERSON
(6 0) TBA – M

### 8 – 10 a.m.

CHE 104 31 GENERAL CHEMISTRY II
JULY 5 TO AUG. 5
(3 0) C 160 – *

### 8 – 10:30 a.m.

CHE 232 31 ORGANIC CHEMISTRY II
JULY 5 TO JULY 29
(3 0) C 130

### 10 a.m. – 12 Noon

CHE 100 31 ESSENTIALS OF CHEMISTRY
(4.0) C 160 – *
CHE 404 31 FOUNDATIONS OF NUTRITION
JULY 5 TO AUG 5
(3 0) C 151

### 10:30 a.m. – 12:30 p.m.

CHE 101 31 FUNDAMENTALS OF CHEMISTRY
JULY 5 TO AUG. 5
(3 0) C 130

### 12 Noon – 4 p.m.

CRL 104 31 EXPERIMENTAL GENERAL CHEMISTRY II (LAB)
JULY 5 TO AUG 5
Tuesday Thru Thursday C 340
(2 0)
CRL 233 31 EXPERIMENTAL ORGANIC CHEMISTRY III LAB
JULY 5 TO JULY 29
Monday Thru Thursday C 361
(2.0)

## CHILDHOOD STUDIES AND READING

### 8–9:30 a.m.
EDE 251 31 CHILD DEVELOPMENT & BEHAVIOR
(3 0) A 105
EDE 310 31 COMMUNICATION SKILLS IN THE ELEM SCHOOL
(3 0) A 107–W

### 8 a.m.–12 Noon
EDE 312 31 READING INSTRUCTION & PRACTICUM
Students will participate in public school's summer reading program.
(6 0) TBA–MP

### 8 a.m.–1:30 p.m.
EDE 312 32 READING INSTRUCTION & PRACTICUM
Students will be interns in Benchmark School's summer reading program.
(6.0) TBA–MP

### 9:30–11 a.m.
EDE 311 31 INTRODUCTION TO READING INSTRUCTION
(3.0) A 116
EDE 401 31 CREATIVITY IN THE CLASSROOM
(3 0) A 102

### 11 a.m.–12:30 p.m.
ECE 204 31 EARLY CHILDHOOD PROGRAMS
(3.0) A 103
EDE 406 31 CLASSROOM MANAGEMENT
(3.0) A 105

## COMMUNICATIVE DISORDERS

### 8–9:30 a.m.
SPP 107 31 SPEECH & LANGUAGE DEVELOPMENT
This course is required for incoming transfer students
Without this course graduanon can be delayed by up to one year
(3 0) WA 200–W

### 8–10:30 a.m.
SPP 351 31 ADV CLIN PRACTICUM
Department approval required
(3 0) TBA

### 9:30–11 a.m.
SPP 106 31 INTRODUCTION TO PHONETICS
This course is required for incoming transfer students
Without this course graduation can be delayed by up to one year.
(3 0) WA 200

### 10:30 a.m.–1 p.m.
SPP 352 31 ADVANCED CLINICAL PRACTICUM
Department approval required
(3 0) TBA

## COMPUTER SCIENCE

See Mathematical Sciences

## COUNSELOR, SECONDARY, & PROFESSIONAL EDUCATION

### 8–9:30 a.m.
EDF 100 31 SCHOOL & SOCIETY
(3.0) A 001

### 9:30–11 a.m.
EDP 249 31 ADOLESCENT DEVELOPMENT
(3 0) A 121
EDP 250 31 EDUCATIONAL PSYCHOLOGY
(3 0) A 101

### 11 a.m.–12:30 p.m.
EDP 351 31 EVALUATION & MEASUREMENT
(3 0) A 001

### 5–8:30 p.m.
EDF 100 32 SCHOOL & SOCIETY
Tuesday-Thursday A 001
(3.0)
EDP 250 32 EDUCATIONAL PSYCHOLOGY
Monday-Wednesday A 102
(3.0)

## CRIMINAL JUSTICE

### TBA
CRJ 490 31 PRACTICUM
(6 0) TBA–MW
CRJ 490 32 PRACTICUM
(6.0) TBA–MW
CRJ 490 33 PRACTICUM
(6.0) TBA–MW
CRJ 490 34 PRACTICUM
(6 0) TBA–MW
CRJ 490 35 PRACTICUM
(6.0) TBA–MW

### 9:30–11 a.m.
CRJ 310 31 JUVENILE JUSTICE ADMINISTRATION
(3 0) J 202

## ECONOMICS

### 8–9:30 a.m.
BUS 400 31 BUSINESS INTERNSHIP
(3 0) TBA
BUS 400 32 BUSINESS INTERNSHIP
(6 0) TBA
ECO 101 31 PRINCIPLES OF ECONOMICS–SURVEY
(3 0) A 213–*
ECO 111 31 PRINCIPLES OF ECONOMICS (MACRO)
(3.0) A 212–*

### 9:30–11 a.m.
ECO 112 31 PRINCIPLES OF ECONOMICS (MICRO)
(3 0) A 213–*
ECO 252 31 QUANTITATIVE BUSINESS ANALYSIS II
JULY 11 TO AUGUST 19
(3.0) A 212
ECO 335 31 MONEY & BANKING
(3 0) A 207
FIN 325 31 CORPORATION FINANCE
(3 0) A 214

### 11 a.m.–12:30 p.m.
ECO 336 31 REGULATION OF COMPETITION
(3 0) A 213
FIN 344 31 INVESTMENTS
(3.0) A 212

### 6–10 p.m.
ECO 111 32 PRINCIPLES OF ECONOMICS (MACRO)
Tuesday-Thursday A 213
(3 0)–*
ECO 112 32 PRINCIPLES OF ECONOMICS (MICRO)
Monday-Wednesday A 212
(3.0)–*
ECO 112 33 PRINCIPLES OF ECONOMICS (MICRO)
JULY 11 TO AUGUST 19
Monday-Wednesday A 213
(3.0)–*
ECO 335 32 MONEY & BANKING
Tuesday-Thursday A 212
(3 0)
FIN 325 32 CORPORATION FINANCE
Monday-Wednesday A 105
(3.0)

## ENGLISH

### TBA
ENG 395 31 INTERNSHIP
(3 0) TBA
ENG 395 32 INTERNSHIP
(6.0) TBA
ENG 395 33 INTERNSHIP
(9 0) TBA

### 8–9:30 a.m.
ENG 020 31 DEVELOPMENTAL ENGLISH II
(3 0) M 201
ENG 120 31 EFFECTIVE WRITING I
(3 0) M 212–*
ENG 121 31 EFFECTIVE WRITING II
(3.0) M 213–*
ENG 330 31 ENGLISH PHONOLOGY
(3 0) M 215

### 9:30–11 a.m.
CLS 260 31 CONTINENTAL LITERATURE I
(3 0) M 201–*W
ENG 120 32 EFFECTIVE WRITING I
(3 0) M 212–*
ENG 121 32 EFFECTIVE WRITING II
(3.0) M 213–*
ENG 331 31 STRUCTURE OF MODERN ENGLISH
(3.0) M 215
LIT 165 31 INTRODUCTION TO LITERATURE
(3.0) M 214–*W
LIT 231 31 ENGLISH LITERATURE II
(3.0) LA 131–W

### 11 a.m. – 12:30 p.m.

ENG 121 33 EFFECTIVE WRITING II
(3 0) M 201 – *
LIT 203 31 AFRO-AMERICAN LITERATURE II
(3 0) M 215 – W
LIT 335 31 SHAKESPEARE I
(3 0) M 214 – W

### 6 – 9:45 p.m.

ENG 120 33 EFFECTIVE WRITING I
Tuesday-Thursday M 201
(3 0) – *
ENG 121 34 EFFECTIVE WRITING II
Monday-Wednesday M 212
(3 0) – *
ENG 121 35 EFFECTIVE WRITING II
Tuesday-Thursday M 212
(3.0) – *
ENG 368 31 ORGANIZATIONAL WRITING
Tuesday-Thursday M 202
(3.0) – W
ENG 371 31 TECHNICAL WRITING
Monday-Wednesday M 202
(3 0) – W
JRN 225 31 NEWSWRITING
Tuesday-Thursday M 215
(3 0) – W
LIT 165 32 INTRODUCTION TO LITERATURE
Monday-Wednesday M 301
(3 0) – *W
LIT 165 33 INTRODUCTION TO LITERATURE
Tuesday-Thursday M 301
(3 0) – *W

## FOREIGN LANGUAGES

### 8 – 9:45 a.m.

FRE 102 31 ELEMENTARY FRENCH II
(TRADITIONAL)
July 5 to August 5
(3 0) TBA
GER 101 3 ELEMENTARY GERMAN I
(3 0) TBA – P
SPA 102 31 ELEMENTARY SPANISH II
July 5 to August 5
(3 0) TBA

### 9:30 – 11 a.m.

GER 102 31 ELEMENTARY GERMAN II
(3 0) TBA – P

### 10 – 11:45 a.m.

FRE 202 31 INTERMEDIATE FRENCH II
(TRADITIONAL)
July 5 to August 5
(3 0) TBA
SPA 202 31 INTERMEDIATE SPANISH II
July 5 to August 5
(3.0) TBA

### 11 a.m. – 12:30 p.m.

GER 201 31 INTERMEDIATE GERMAN I
(3 0) TBA – P
GER 202 31 INTERMEDIATE GERMAN II
(3.0) TBA

## GEOGRAPHY

See Government and Planning

## GEOLOGY AND ASTRONOMY

### TBA

ESS 323 31 GEN'L GEOL FIELD STUDIES OF SE PENNA
(3 0) C 053
ESS 460 31 INTERNSHIP
APPROVAL OF CHAIRPERSON
(1 0) TBA – P
ESS 460 32 INTERNSHIP
APPROVAL OF CHAIRPERSON
(2.0) TBA – P
ESS 460 33 INTERNSHIP
APPROVAL OF CHAIRPERSON
(3 0) TBA – P
ESS 460 34 INTERNSHIP
APPROVAL OF CHAIRPERSON
(6 0) TBA – P

### 8 – 9:30 a.m.

ESS 101 31 INTRODUCTION TO GEOLOGY
(3 0) C 050 – *

### 9:30 – 11 a.m.

ESS 101 32 INTRODUCTION TO GEOLOGY
(3.0) C 050 – *
ESS 111 31 GENERAL ASTRONOMY
(3 0) C 186 – *
SCE 310 31 SCIENCE FOR THE ELEMENTARY GRADES
(3 0) C 151

### 6 – 9:30 p.m.

ESS 101 33 INTRODUCTION TO GEOLOGY
Monday-Wednesday C 050
(3.0) – *
ESS 230 31 INTRODUCTION TO OCEANOGRAPHY
Tuesday-Thursday C 151
(3 0)

### 7 – 10:30 p.m.

ESS 111 32 GENERAL ASTRONOMY
Monday-Wednesday C 186
(3 0) – *

## GOVERNMENT & PLANNING

### TBA

GEO 415 31 INTERNSHIP IN GEOGRAPHY & PLANNING
(3.0) TBA
GEO 415 32 INTERNSHIP IN GEOGRAPHY & PLANNING
(6.0) TBA
PAD 412 31 INTERNSHIP IN PUBLIC ADMINISTRATION
(3.0) TBA
PAD 412 32 INTERNSHIP IN PUBLIC ADMINISTRATION
(6 0) TBA
PSC 401 31 SENIOR PROJECT IN POLITICAL SCIENCE
(3 0) TBA
PSC 412 31 INTERNSHIP IN POLITICAL SCIENCE
(3 0) TBA
PSC 412 32 INTERNSHIP IN POLITICAL SCIENCE
(6.0) TBA

### 9:30 – 11 a.m.

GEO 101 31 WORLD GEOGRAPHY
(3.0) J 204 – *
PSC 100 31 AMERICAN GOVERNMENT & POLITICS
(3 0) J 102 – *

### 6 – 10 p.m.

GEO 101 32 WORLD GEOGRAPHY
Monday-Wednesday J 204
(3 0) – *
PSC 213 31 INTERNATIONAL RELATIONS
Tuesday-Thursday J 104
(3 0) – *

## HEALTH

### TBA

HEA 259 31 CLINICAL PRACTICE II
Offered at Bryn Mawr Hospital
(3 0) OCL
HEA 264 31 CLINICAL PRACTICE IV
Offered at Bryn Mawr Hospital
(4 0) OCL
HEA 308 31 FIELD EXPERIENCE IN HEALTH
(1 0) OCL
HEA 421 31 PUBLIC HEALTH INTERNSHIP
(6.0) OCL – M
HEA 456 31 ENVIRONMENTAL HEALTH INTERNSHIP
(6 0) OCL – M
HEA 456 32 ENVIRONMENTAL HEALTH INTERNSHIP
(6.0) OCL – M

### 8 – 9:30 a.m.

HEA 103 31 ADDICTIVES
(3 0) H 327
HEA 203 31 HEALTH EDUCATION I
(3 0) H 331
HEA 303 31 NUTRITION-WEIGHT CONTROL
(3 0) H 326

### 8:30 a.m. – 4:30 p.m.

HEA 435 31 HEALTH WORKSHOP: HUMAN SEXUALITY
July 6 to July 12
(3 0) H 328
HEA 435 32 HEALTH WORKSHOP: HUMAN SEXUALITY
July 20 to July 26
(3.0) H 328

### 9:30 – 11 a.m.

HEA 202 31 HEALTH EDUCATION II
(3 0) H 331
HEA 301 31 HEALTH FOR THE ELEMENTARY GRADES
(3 0) H 327
HEA 341 31 CHRONIC & COMMUNICABLE DISEASES
(3 0) H 326

## HISTORY

Independent Studies in History (HIS490), Internship in History (HIS450) and Field Studies in History (HIS460) may be scheduled with the permission of the chairperson

### 8–9:30 a.m.

HIS 100 31 MAINSTREAMS IN HISTORY
(3 0) M 214–*

### 9:30–11 a.m.

ASH 200 31 AMERICAN CIVILIZATION
(3 0) J 104–*I
HIS 100 32 MAINSTREAMS IN HISTORY
(3 0) M 315–*
HIS 315 31 HISTORY OF LATIN AMERICA TO 1825
(3.0) M 417

## INSTRUCTIONAL MEDIA

### TBA

EDM 290 31 INTERNSHIP
(4 0) A 007
EDM 290 32 INTERNSHIP
(6 0) A 007
EDM 290 33 INTERNSHIP
(9 0) A 007
EDM 290 34 INTERNSHIP
(12 0) A 007
EDM 290 35 INTERNSHIP
(15 0) A 007
EDM 498 75 WORKSHOP IN INSTRUCTIONAL MEDIA
July 14 to July 28
(3 0) A 007
EDM 498 76 WORKSHOP IN INSTRUCTIONAL MEDIA
July 14 to July 28
(6 0) A 007

### 9:30–11 a.m.

EDM 225 31 BASIC PHOTOGRAPHY
(3.0) A 006–*
EDM 425 31 BASIC PHOTOGRAPHY
(3.0) A 006–*

### 11 a.m.–12:30 p.m.

EDM 300 31 INTRODUCTION TO INSTRUCTIONAL COMMUNICATION
(3 0) A 006

## MATHEMATICAL SCIENCES

### TBA

CSC 400 31 COOPERATIVE SPECIALTY
Permission of Mr Edelman
(9 0) TBA
CSC 490 31 INDEPENDENT PROJECT IN COMPUTER SCIENCE
Permission of Dr. Weaver
(1 0) TBA–P
CSC 490 32 INDEPENDENT PROJECT IN COMPUTER SCIENCE
Permission of Dr Weaver
(2.0) TBA–P
CSC 490 33 INDEPENDENT PROJECT IN COMPUTER SCIENCE
Permission of Dr Weaver
(3 0) TBA–P
CSC 490 34 INDEPENDENT PROJECT IN COMPUTER SCIENCE
Permission of Dr. Weaver
(4 0) TBA–P
CSC 490 35 INDEPENDENT PROJECT IN COMPUTER SCIENCE
Permission of Dr. Weaver
(5 0) TBA–P
CSC 499 31 INDEPENDENT STUDY IN COMPUTER SCIENCE
Permission of Dr. Weaver
(1 0) TBA–P
CSC 499 32 INDEPENDENT STUDY IN COMPUTER SCIENCE
Permission of Dr Weaver
(2 0) TBA–P
CSC 499 33 INDEPENDENT STUDY IN COMPUTER SCIENCE
Permission of Dr Weaver
(3 0) TBA–P

### 8–9:30 a.m.

CSC 115 31 INTRODUCT TO COMPUTER SCIENCE WITH APL
(3.0) A 013–*
CSC 141 31 INTRODUCTION TO COMPUTER SCIENCE
(3 0) A 117
MAT 000 31 FUNDAMENTALS OF ALGEBRA
(3 0) A 112
MAT 101 31 MATHEMATICS FOR ELEMENTARY TEACHERS I
(3 0) A 111–*
MAT 103 31 INTRODUCTION TO MATHEMATICS
(3 0) A 114–*
MAT 107 31 CALCULUS FOR BUSINESS I
(3.0) A 116–*

### 9:30–11 a.m.

CSC 101 31 INTRODUCTION TO COMPUTERS
(3.0) A 013–*
CSC 141 32 INTRODUCTION TO COMPUTER SCIENCE
(3 0) A 117
CSC 350 31 COMPUTERS IN EDUCATION
(3 0) A 011
MAT 000 32 FUNDAMENTALS OF ALGEBRA
(3 0) A 112
MAT 102 31 MATHEMATICS FOR ELEMENTARY TEACHERS II
(3 0) A 111–*
MAT 105 31 COLLEGE ALGEBRA & TRIGONOMETRY
(3 0) A 113–*
MAT 108 31 CALCULUS FOR BUSINESS II
(3 0) A 115–*
MAT 121 31 STATISTICS
(3 0) A 114–*
MAT 390 31 SEMINAR IN MATHEMATICS EDUCATION
(3 0) TBA

### 11 a.m.–12:45 p.m.

MAT 162 31 APPLIED CALCULUS II
(4 0) A 116–*
MAT 211 31 LINEAR ALGEBRA
(3 0) A 111
MAT 221 31 APPLIED STATISTICS
(3 0) A 113
MAT 231 31 FOUNDATIONS OF GEOMETRY
(3 0) TBA
MAT 351 31 TEACHING MATHEMATICS IN ELEMENTARY SCHOOL
(3 0) A 115

### 11 a.m.–1 p.m.

MAT 142 31 CALCULUS II
(5 0) A 114–*

### 6–9:30 p.m.

CSC 101 32 INTRODUCTION TO COMPUTERS
Monday-Wednesday A 013
(3 0)–*
CSC 115 32 INTRODUCT TO COMPUTER SCIENCE WITH APL
Tuesday-Thursday A 013
(3 0)–*
CSC 142 31 APPLIED SOFTWARE
Monday-Wednesday A 116
(3 0)
CSC 242 31 COMPUTER ORGANIZATION
Tuesday-Thursday A 116
(3.0)
CSC 361 31 SIMULATION
Monday-Wednesday A 117
(3 0)
CSC 371 31 COMPUTER GRAPHICS
Tuesday-Thursday A 117
(3.0)
CSC 495 31 TOPICS IN COMPUTER SCIENCE
Monday-Wednesday A 114
(3 0)–P

## MUSIC: HISTORY & LITERATURE

### TBA

MHL 479 31 SPECIAL SUBJECTS SEMINAR I THE ARTS IN COLONIAL AMERICA MON THRU SAT., JULY 11 TO JULY 16
(3 0) TBA
MHL 480 31 SPECIAL SUBJECTS SEMINAR II: THE ROCK GENERATION MON THRU FRI., JUNE 20 TO JUNE 24
(3 0) TBA
MHL 480 32 SPECIAL SUBJECTS SEMINAR II: INSTRUMENTAL MUSIC IN LATE 18TH CENTURY MON THRU FRI., JULY 18 TO JULY 22
(3 0) TBA

## MUSIC: INSTRUMENTAL

### TBA

### Private Instrumental Lessons

Prefixes. BAR, BAS, BSN, CLT, FLU, FRH, GTR, OBO, PER, SAX, TBA, TPT, TRB, VCL, VLN
101-402 Minor Level (1)
111-412 Major Level (2)
141-442 Advanced Level (3)

### 12:30 – 2 p.m.

AIC 312 31 INSTRUMENTAL CONDUCTING II
JUNE 20 TO JULY 15
(2.0) SIN

### 2 – 3 p.m.

AEB 121 31 CONCERT BAND
JUNE 20 TO JULY 15
(1.0) SAU

## MUSIC: THEORY & COMPOSITION

### 8 a.m. – 5 p.m.

MTC 416 31 JAZZ PRACTICES SPECIAL FEE. REGISTER THRU WKSP DIR. ONLY
JUNE 27 TO JULY 1
(2.0) SAU

MTC 416 32 JAZZ PRACTICES SPECIAL FEE. REGISTER THRU WKSP DIR. ONLY
JUNE 27 TO JULY 1
(3.0) SAU

MTC 417 31 ELECTRONIC MUSIC – KEYBOARD SPECIAL FEE. REGISTER THRU WKSP DIR. ONLY
JULY 24 TO JULY 29
(3.0) SAU

MTC 417 32 ELECTRONIC MUSIC – SYNTHESIZERS SPECIAL FEE. REGISTER THRU WKSP DIR. ONLY
JULY 24 TO JULY 29
(3.0) SAU

### 9:30 – 11 a.m.

MTC 112 31 THEORY OF MUSIC I
(3.0) S 005

MTC 113 31 THEORY OF MUSIC II
(3.0) S 005 – M

MTC 212 31 THEORY OF MUSIC III
(3.0) S 006 – M

MTC 213 31 THEORY OF MUSIC IV
(3.0) S 006 – M

### 11 a.m. – 12:30 p.m.

MTC 114 31 AURAL ACTIVITIES I
(2.0) S 005

MTC 115 31 AURAL ACTIVITIES II
(2.0) S 005 – M

MTC 214 31 AURAL ACTIVITIES III
(2.0) S 006 – M

MTC 215 31 AURAL ACTIVITIES IV
(2.0) S 006 – M

## MUSIC: VOCAL & CHORAL

### TBA

VOI 101-402 PRIVATE VOICE LESSONS – VOICE MINOR (1)

VOI 111-412 PRIVATE VOICE LESSONS – VOICE MAJOR (2)

VOC 429 31 SPECIAL SUBJECTS SEMINAR: CONCERT TOUR OF ROMANIA AND BULGARIA
JULY 14 TO AUGUST 1
AUDITION
(3.0) TBA – SP

VOC 429 32 SPECIAL SUBJECTS SEMINAR. CONCERT TOUR OF ROMANIA AND BULGARIA
JULY 14 TO AUGUST 1
AUDITION
(2.0) TBA – SP

## PHILOSOPHY

### 8 – 9:30 a.m.

PHI 101 31 INTRODUCTION TO PHILOSOPHY
(3.0) M 401 – *

### 9:30 – 11 a.m.

PHI 101 32 INTRODUCTION TO PHILOSOPHY
(3.0) M 401 – *

### 6 – 9:30 p.m.

PHI 101 33 INTRODUCTION TO PHILOSOPHY
Monday-Wednesday M 401
(3.0) – *

PHI 101 34 INTRODUCTION TO PHILOSOPHY
Tuesday-Thursday M 401
(3.0) – *

## PHYSICAL EDUCATION

### TBA

PED 370 31 CAMP COUNSELING
BY SPECIAL ARRANGEMENT WITH PROF. LAULET BEFORE REGISTRATION
(3.0) TBA – P

PED 435 31 PHYSICAL FITNESS SPECIALIST INTERNSHIP
PRIOR APPROVAL
(6.0) TBA – P

PED 491 31 STUDENT TEACHING (WOMEN)
PRIOR APPROVAL
(6.0) TBA – P

### 9:30 – 10:30 a.m.

PEA 140 31 AEROBIC DANCE-FITNESS
(1.0) H 102 – *

### 9:30 – 11:30 a.m.

PED 456 31 INTRODUCTION TO THE DRIVING TASK
(3.0) H 325

### 10 a.m. – 1 p.m.

PED 142 31 TENNIS MUST ALSO REGISTER FOR PED 143
(0.5) GYM 5

PED 143 31 GOLF MUST ALSO REGISTER FOR PED 142
(0.5) GYM 4

### 11 a.m. – 12:30 p.m.

PEA 128 31 TENNIS
(1.0) H 225 – *

### 6 – 8 p.m.

PED 434 31 ORG & MGT OF ADULT FITNSS PROGS CLIN SEM
PRIOR APPROVAL
Monday Thru Thursday H 332
(3.0) – P

## PHYSICS

### TBA

PHY 490 31 INTRODUCTION TO RESEARCH
Permission of Dept. Chairperson
(1.0) TBA – P

PHY 490 32 INTRODUCTION TO RESEARCH
Permission of Dept. Chairperson
(2.0) TBA – P

PHY 490 33 INTRODUCTION TO RESEARCH
Permission of Dept. Chairperson
(3.0) TBA – P

### 8 a.m. – 12 Noon

PHY 130 31 GENERAL PHYSICS I
June 20 to July 15
(4.0) C 240 – *

PHY 140 31 GENERAL PHYSICS II
July 18 to August 12
(4.0) C 240 – *

### 9:30 – 11 a.m.

PHY 100 31 ELEMENTS OF PHYSICAL SCIENCE
(3.0) C 260 – *

## POLITICAL SCIENCE

See Government and Planning

## PSYCHOLOGY

### TBA

PSY 441 31 FIELD EXPERIENCE IN PSYCHOLOGY I
(3.0) TBA

PSY 442 31 FIELD EXPERIENCE IN PSYCHOLOGY II
(3.0) TBA

### 7 – 10 p.m.

PSY 445 31 ORGANIZATIONAL DEVELOPMENT
July 5 to August 4
Open to Graduate Students
Tuesday Thru Thursday A 201
(3.0)

### 8 – 9:30 a.m.

PSY 100 31 INTRODUCTION TO PSYCHOLOGY
(3.0) A 201 – *

PSY 464 31 PHYSIOLOGICAL PSYCHOLOGY
(3.0) A 203

### 9:30 – 11 a.m.

PSY 100 32 INTRODUCTION TO PSYCHOLOGY
(3.0) A 201 – *

PSY 375 31 ABNORMAL PSYCHOLOGY
(3.0) A 203

### 6 – 9:30 p.m.

PSY 100 33 INTRODUCTION TO PSYCHOLOGY
Monday-Wednesday A 207
(3.0) – *

PSY 100 34 INTRODUCTION TO PSYCHOLOGY
Tuesday-Thursday A 207
(3.0) – *

PSY 357 31 THEORIES OF PERSONALITY
Monday-Wednesday A 203
(3.0)

## SOCIOLOGY

See Anthropology & Sociology

## SPECIAL EDUCATION

### 12:30 – 2:30 p.m.

EDA 301 31 FIELD EXPERIENCE & SEMINAR: MENTALLY HANDICAPPED
Tuesday-Thursday E 101
(3.0)

EDA 302 31 FIELD EXPERIENCE & SEMINAR: PHYSICALLY HANDICAPPED
Tuesday-Thursday E 101
(3.0)

## SPEECH COMMUNICATION & THEATRE

### TBA

SPC 399 31 DIRECTED STUDIES IN SPEECH COMMUNICATION
Approval of Chairperson Required
(3.0) TBA

SPC 400 31 INTERNSHIP IN SPEECH COMMUNICATION
Approval of Chairperson Required
(3.0) TBA

SPC 400 32 INTERNSHIP IN SPEECH COMMUNICATION
Approval of Chairperson Required
(6.0) TBA

THA 399 31 DIRECTED STUDIES IN THEATRE
Approval of Chairperson Required
(3.0) TBA – *

THA 400 31 PROFESSIONAL APPRENTICESHIP
Approval of Chairperson Required
(3.0) TBA – *

### 8 – 9:30 a.m.

SPC 101 31 SPEECH FUNDAMENTALS: INTERPERS COMMUNIC
(3.0) M 418

SPC 216 31 STRUCTURED PROBLEM SOLVING
(3.0) M 413 – W

### 9:30 – 11 a.m.

SPC 204 31 DYADIC COMMUNICATION
(3.0) M 413

THA 101 31 INTRODUCTION TO THE THEATRE
(3.0) M 418 – *

### 11 a.m. – 12:30 p.m.

SPC 350 31 COMMUNICATION IN PERSPECTIVE
(3.0) M 413

SPC 415 31 GENERAL SEMANTICS
(3.0) M 418 – W

# Post Session Offerings

## Monday, August 1 through Friday, August 19

**Unless noted otherwise, classes meet Monday through Friday.**

**Classes which meet from 8:00 a.m. to 12:00 Noon have a break from 9:30 to 10:30 a.m.**

**Key**

| | |
|---|---|
| * | Meets General Education Requirements |
| W | Writing Emphasis |
| $ | Additional Fee Required |
| M | Majors Only |
| P | Permission of Instructor |
| I | Interdisciplinary |
| L | Individualized Learning System |

**Building Codes**

| | |
|---|---|
| A | Anderson Hall |
| B | Elsie O. Bull Center |
| BG | Bull Center Ground Floor |
| C | Schmucker Science Center |
| CASH | Coatesville |
| D | Lawrence Center |
| E | Special Education Building |
| EXTN | Exton |
| EGH | Ehinger Gym |
| F | Fine Arts Bldg. (Mitchell Hall) |
| G | Old Library |
| H | South Campus Field House |
| J | Ruby Jones Hall |
| JG | Ruby Jones Hall Ground Floor |
| K | Hollinger Field House |
| L | Green Library |
| M | Main Hall |
| MF | McCoy Farm (South Campus) |
| OCL | Off-Campus Location (Contact Dept.) |
| PML | Philips Memorial Library |
| PMB | Philips Memorial Ballroom |
| R | Recitation Hall |
| S | Swope Hall (Music Building) |
| SAU | Swope Auditorium |
| SIN | Swope Instrumental Room |
| TBA | To Be Announced |
| UPDY | Upper Darby |
| WA | Wayne Hall |

## ACCOUNTING

### 8 a.m. – 12 Noon

ACC 202 41 PRINCIPLES OF ACCOUNTING II
(3.0) TBA

## ANTHROPOLOGY & SOCIOLOGY

### 8 a.m. – 12 Noon

SOC 240 41 SOCIOLOGY OF THE FAMILY
(3.0) G 203 – *

## ASTRONOMY

See Geology & Astronomy

## ART

### 8 a.m. – 12 Noon

ARH 101 41 LEARNING TO LOOK: FINE ARTS, ART
(3.0) F 201 – *

ARH 102 41 SURVEY OF ART HISTORY
(3.0) F 201 – *

## BIOLOGY

Internship in Biological Science (BIO409) and Special Problems in Biology (BIO491) are available by arrangement with the Biology department.

### 8 a.m. – 12 Noon

BIO 100 41 BASIC BIOLOGICAL SCIENCE
(3.0) C 100 – *

## BUSINESS ADMINISTRATION

### 8 a.m. – 12 Noon

BLA 202 41 SPECIAL SUBJECTS IN BUSINESS LAW
(3.0) TBA

MGT 301 41 PRINCIPLES OF MANAGEMENT
(3.0) TBA

MGT 408 41 BUSINESS & SOCIETY
(3.0) TBA

MKT 301 41 PRINCIPLES OF MARKETING
(3.0) TBA

MKT 320 41 MANAGING SALES
(3.0) TBA

## CHEMISTRY

### TBA

CHE 410 41 ADVANCED INDEPENDENT STUDY OR RESEARCH
PERMISSION OF CHAIRPERSON
(3.0) TBA – M

CHE 450 41 INTERNSHIP IN CHEMISTRY
PERMISSION OF CHAIRPERSON
(3.0) TBA – M

CHE 450 42 INTERNSHIP IN CHEMISTRY
PERMISSION OF CHAIRPERSON
(5.0) TBA – M

## CHILDHOOD STUDIES AND READING

### 8 a.m. – 4 p.m.

EDE 481 41 CONSTRUCT ACTIV-ORIENTED TCHG MATERIALS
AUGUST 1 TO AUGUST 5
(3 0) H 220

EDE 481 42 CONSTRUCT ACTIV-ORIENTED TCHG MATERIALS
AUGUST 8 TO AUGUST 12
(3 0) H 220

## COMPUTER SCIENCE

See Mathematical Sciences

## COUNSELOR, SECONDARY, & PROFESSIONAL EDUCATION

### 8 a.m. – 12 Noon

EDP 351 41 EVALUATION & MEASUREMENT
(3 0) A 101

### 12 Noon – 3 p.m.

EDF 100 41 SCHOOL & SOCIETY
(3.0) A 101

## CRIMINAL JUSTICE

### TBA

CRJ 490 41 PRACTICUM
(3.0) TBA–MW

CRJ 490 42 PRACTICUM
(3.0) TBA–MW

CRJ 490 43 PRACTICUM
(3 0) TBA–MW

CRJ 490 44 PRACTICUM
(3 0) TBA–MW

CRJ 490 45 PRACTICUM
(3.0) TBA–MW

## ECONOMICS

### TBA

BUS 400 41 BUSINESS INTERNSHIP
(3.0) TBA

## ENGLISH

### 8 a.m. – 12 Noon

ENG 120 41 EFFECTIVE WRITING I
(3 0) M 201 – *

LIT 165 41 INTRODUCTION TO LITERATURE
(3.0) M 212 – *W

LIT 200 41 AMERICAN LITERATURE I
(3 0) M 214 – W

### 6 – 9:45 p.m.

LIT 165 42 INTRODUCTION TO LITERATURE
Monday Thru Thursday M 201
(3.0) – *W

## GEOGRAPHY

See Government and Planning

## GEOLOGY AND ASTRONOMY

### TBA

ESS 395 41 GEOLOGY OF THE SOUTHWESTERN NATIONAL PARKS
FIELD TRIP OUT WEST
(4 0) OCL – $P

ESS 460 41 INTERNSHIP
APPROVAL OF CHAIRPERSON
(1 0) TBA – P

ESS 460 42 INTERNSHIP
APPROVAL OF CHAIRPERSON
(2.0) TBA – P

ESS 460 43 INTERNSHIP
APPROVAL OF CHAIRPERSON
(3 0) TBA – P

### 8 a.m. – 12 Noon

ESS 101 41 INTRODUCTION TO GEOLOGY
(3 0) C 050 – *

### 9 a.m. – 1 p.m.

ESS 111 41 GENERAL ASTRONOMY
(3.0) C 186 – *

### 6 – 9:30 p.m.

ESS 111 42 GENERAL ASTRONOMY
Monday Thru Thursday C 186
(3 0) – *

## GOVERNMENT & PLANNING

### TBA

GEO 415 41 INTERNSHIP IN GEOGRAPHY & PLANNING
(3 0) TBA

PAD 412 41 INTERNSHIP IN PUBLIC ADMINISTRATION
(3 0) TBA

PSC 412 41 INTERNSHIP IN POLITICAL SCIENCE
(3.0) TBA

### 8 a.m. – 12 Noon

PSC 100 41 AMERICAN GOVERNMENT & POLITICS
(3 0) J 204 – *

### 6 – 10 p.m.

GEO 101 41 WORLD GEOGRAPHY
Monday Thru Thursday J 204
(3 0) – *

## HEALTH

### TBA

HEA 261 41 RESPIRATORY THERAPY SEMINAR I
Given at Bryn Mawr Hospital
(2 0) OCL

HEA 421 41 PUBLIC HEALTH INTERNSHIP
(3 0) OCL – M

HEA 456 41 ENVIRONMENTAL HEALTH INTERNSHIP
(3 0) OCL – M

HEA 456 42 ENVIRONMENTAL HEALTH INTERNSHIP
(3 0) OCL – M

### 8:30 – 11:30 a.m.

HEA 100 41 DIMENSIONS OF WELLNESS
(3 0) TBA – *

HEA 104 41 HUMAN SEXUALITY
(3 0) H 326

## HISTORY

Independent Studies in History (HIS490), Internship in History (HIS450) and Field Studies in History (HIS460) may be scheduled with the permission of the chairperson

### 8 a.m. – 12 Noon

HIS 100 41 MAINSTREAMS IN HISTORY
(3 0) M 303 – *

## INSTRUCTIONAL MEDIA

### 8 a.m. – 12 Noon

EDM 425 41 BASIC PHOTOGRAPHY
(3 0) A 006 – *

EDM 463 41 FIELD STUDY OF MEDIA PROGRAMS
(3 0) A 007

## MATHEMATICAL SCIENCES

### 8 a.m. – 12 Noon

CSC 101 41 INTRODUCTION TO COMPUTERS
(3 0) A 013 – *

MAT 000 41 FUNDAMENTALS OF ALGEBRA
(3.0) A 112

MAT 103 41 INTRODUCTION TO MATHEMATICS
(3 0) A 111 – *

MAT 105 41 COLLEGE ALGEBRA & TRIGONOMETRY
(3.0) A 113 – *

### 6 – 10 p.m.

CSC 101 42 INTRODUCTION TO COMPUTERS
Monday Thru Thursday A 013
3 0) – *

CSC 331 41 OPERATING SYSTEMS
Monday Thru Thursday A 117
(3.0)

## MUSIC: INSTRUMENTAL

### 9 a.m. – 4:30 p.m.

AIM 429 41 SPECIAL SUBJECTS SEMINAR
AUGUST 1 & 2
WOODWIND REPAIR
Monday-Tuesday S 010
(1 0)

AIM 429 42 SPECIAL SUBJECTS SEMINAR
AUGUST 3 & 4
BRASS REPAIR
Wednesday-Thursday S 010
(1 0)

## PHILOSOPHY

### 8 a.m. – 12 Noon

PHI 101 41 INTRODUCTION TO PHILOSOPHY
(3 0) M 401 – *

### 6 – 9:30 p.m.

PHI 101 42 INTRODUCTION TO PHILOSOPHY
Monday Thru Thursday M 401
(3 0) – *

## PHYSICAL EDUCATION

### TBA

PED 373 41 WILDERNESS ADVENTURE III
SEE B REMLEY
FIRST TWO WEEKS OF AUGUST
(2.0) OCL – $P
PED 435 41 PHYSICAL FITNESS SPECIALIST INTERNSHIP
PRIOR APPROVAL
(3.0) TBA – P
PED 491 41 STUDENT TEACHING (WOMEN)
PRIOR APPROVAL
(3 0) TBA – P

### 8 – 11:30 a.m.

PED 352 41 APPLIED PHYSIOLOGY
(3 0) H 332

### 12:30 – 2:30 p.m.

PEA 128 41 TENNIS
(1 0) GYM 5 – *

### 6 – 8 p.m.

PEA 112 41 HORSEMANSHIP
Monday Thru Thursday H 225
(1 0) – $*

## POLITICAL SCIENCE

See Government and Planning

## SOCIOLOGY

See Anthropology & Sociology

## SPEECH COMMUNICATION & THEATRE

### TBA

SPC 399 41 DIRECTED STUDIES IN SPEECH COMMUNICATION
Approval of Chairperson Required
(3.0) TBA
SPC 400 41 INTERNSHIP IN SPEECH COMMUNICATION
Approval of Chairperson Required
(3 0) TBA
THA 399 41 DIRECTED STUDIES IN THEATRE
Approval of Chairperson Required
(3 0) TBA – *
THA 400 41 PROFESSIONAL APPRENTICESHIP
Approval of Chairperson Required
(3 0) TBA – *

# Workshops

## Childhood Studies and Reading

### Constructing Activity-Oriented Teaching Materials

EDE 481 – 3 Credits
August 1–5 and August 8–12
8:00 a m –4.00 p.m

A workshop experience for students interested in exploring the many facets of making activity-oriented learning materials for the classroom Dr Connie Zimmerman will work with creative arts, creative drama, and puppetry for use with children Professor Dunlap will provide experiences with construction of learning centers and enrichment and reinforcement materials for the academic areas.

For more information, contact Dr Connie Zimmerman, West Chester University. West Chester, PA 19383 (215) 436-3323 or Professor Scott Dunlap, (215) 436-3319

## Counselor, Secondary, and Professional Education

### Workshop in Secondary Education: Communicative Skills for Teachers

EDF 498 – 3 Credits
May 31–June 17
6:00–9 00 p.m
Fee: Undergraduate Credit

This workshop focuses on the teacher-to-student and the teacher-to-parent communicative relationships An examination of classroom problems leads to a discussion of problem prevention. Strategies to be used in each participant's classroom will be emphasized Strategies dealing with other communicative areas will be explored

For more information, contact Dr Harry H Deischer, West Chester University, West Chester, PA, 19383 (215) 436-2411

### Workshop in Educational Psychology: Stress Management and Burn Out Avoidance

EDP 498 – 3 Credits
July 5–August 4 Tuesday through Thursday
Fee: Undergraduate Credit

This workshop will use group exploration to identify problems encountered in teaching Particular attention will be devoted to stress management, burn-out avoidance, understanding and reducing negative behavior in the classroom, working successfully with peers and administration, and learning to live happily with oneself

For more information contact Dr Wallace Kahn, West Chester University, West Chester, PA 19383 (215) 436-2197

## Foreign Languages

### Self-Instructional Language Program

3–6 Credits
June–July

Conversational Arabic, Chinese, Dutch, Finnish, Greek, Hebrew, Japanese, or Portuguese. During the Summer, 1988 students may learn conversational languages depending on enrollment and staff at West Chester University Permission prior to registration is necessary

For more information contact Mr. Ron Gougher, Department of Foreign Languages, West Chester University, West Chester, PA 19383 (215) 436-2700

### Foreign Language Majors Programs

Students from other colleges and universities are welcome to apply for admission to the program Students may begin any time that can be arranged during June and complete work in July Time spent and credits earned will vary according to the need of students. Permission prior to registration is required for all programs

### Classical Languages Majors Program

3–6 Credits
June–July

Students must register with Mr John P Rosso, Department of Foreign Languages, West Chester University, West Chester, PA 19383 (215) 436-2465

### French Majors Program

3–6 Credits
June–July

Students must register with Roger Brown, Department of Foreign Languages, West Chester University, West Chester, PA 19383 (215) 436-2169

### German Majors Program

3–6 Credits
June–July

Students must register with Mr Ronald L. Gougher, Chairperson, Department of Foreign Languages, West Chester University, West Chester, PA 19383 (215) 436-2700.

### Spanish Majors Program

3–6 Credits
June–July
Students must register with Dr. Erminio Braidotti, Department of Foreign Languages, West Chester University, West Chester, PA 19383 (215) 436-2372

## Geology and Astronomy

### Geology of the Southwestern National Parks

ESS 395–4 Credits
July 30–August 19
Fee: $600 for transportation and meals plus tuition
A three week geology field trip to the national parks of New Mexico, Arizona, Utah, and Colorado. The emphasis will be on the landform development in this region and the geologic history of the region. Stops will be made at Carlsbad Caverns, the Grand Canyon, Zion Canyon, Bryce Canyon, Arches, the Black Canyon of the Gunnison, and Rocky Mountain National park. All overnight accommodations will be at recognized campsites.
For more information contact Dr. Allen Johnson, Department of Geology and Astronomy, West Chester University, West Chester, PA 19383 (215) 436-3565

## Health

### Health Workshop: Human Sexuality

HEA 435–3 Credits
Sec. 31–July 6–12
Sec. 32–July 8–14
Fee: Undergraduate Credit
This is a practical workshop enabling students to witness and discuss, first-hand, new developments in the field. Activities will include visits and discussions at a Planned Parenthood clinic, an abortion clinic, and a natural childbirth facility. Also included will be meetings with professionals in the areas of rape, sex therapy, and sex education. Enrollment is on a limited basis.
For more information, write Dr. Robert Nye, Department of Health, West Chester University, West Chester, PA 19383, (215) 436-2142

### Health Workshop: Eating and Living

HEA 435-21–3 Credits
Pre Session
Fee: Undergraduate Credit
This is an introductory course in nutrition specifically designed for the lay public who are interested in learning about sound nutrition principles and practices in order to improve their health. No science background is needed. In addition to lectures and discussions, the students will learn to record their food intake and energy expenditure, and the formulation of diet for personal use. Some of the topics to be covered are carbohydrates, fats, proteins, vitamins and minerals–what foods are good sources, what they do in our bodies; "health" foods, weight control; exercise and athletic performance; food additives and preservatives, and many more.
For more information, contact Dr. Franklin Young, Department of Health, West Chester University, West Chester, PA 19383 (215) 436-2931 or 436-2125.

## Instructional Media

### Workshop in Instructional Media – Travel and Landscape Photography (Switzerland)

EDM 498-75–3 Credits
EDM 498-76–6 Credits
July 14–28
Fee: $228.00–$456.00 plus travel expenses
This is a working course in travel and landscape photography offered by the Instructional Media Department. The class will meet for 2 full days at the start of Regular Session. Instruction will also be provided during a two-week trip to Switzerland. Students will be assigned projects to be completed during the trip. The nature of the projects will be determined by the number of credits taken. A half-day wrap-up session will be held at the end of Regular Session.
For more information, contact David Redmond, Department of Instructional Media, West Chester University, West Chester, PA 19383, (215) 436-2245.

## Music History

### Music History Special Subjects I: The Arts in Colonial America

MHL 479-31–3 Credits
July 11–July 16
Fee: $95.00 workshop fee plus credit fees
This workshop is designed to introduce the participant to various aspects of early American culture. The music of Colonial America (from 1620 to approximately 1820) will be the primary focus of the workshop, but inter-relationships with early American theater, architecture, dancing, painting, and the decorative arts will also be considered. The workshop is designed to demonstrate what cultural life in our country was like during the period under consideration–with special attention paid to the Delaware Valley. Several field trips, instruction in square dancing, visits to museums and archives, and "hands on" experience with primary source materials are planned for the workshop.
For more information, contact Dr. Sterling Murray, Mitchell 402, West Chester University, West Chester, PA, (215) 436-2563 or 436-2530.

### Special Subjects Seminar II The Rock Generation: Popular Music and American Culture in the 1950's and 1960's

MHL 480-31–3 Credits
June 20–24
Fee: $95.00 workshop fee plus credit fees
The workshop will investigate in depth the rise of rock'n'roll in the 1950's, its sources in folk and popular culture, and the social and political conditions that made it possible in post-World Warr II America.
By the mid-1950's the shift of mainstream popular entertainment from radio to television had given rise to the disc jockey–the pied piper to a new generation of affluent teenagers. The inexpensive technology of the tape recorder had provided a means to manufacture phonograph records in a studio, and this made possible the flonshing of many small record companies specializing in rhythm-and-blues and country-western music. The sounds of these musical styles caught the imagination of American and British youth and a new era of international popular music had begun.
In the mid-1960's teenagers had become young adults, and the burning social and political issues of the time–civil rights, free speech, domestic violence, drugs, the anti-war movement became the topics of their songs. A concurrent sense of optimism envisioned rapid changes in society, and new utopias were proposed and put into action.
The folk-protest music of the 1950's became intertwined with rock, and the concept of the rock festival quickly evolved. In many ways the Woodstock Festival of 1969 represented both the apotheosis and the swan song of an era.
Workshop activities include lecture, music listening, film and video viewing, and discussion.
For more information, contact Dr. Charles Price, Studio 18, Swope Hall, West Chester University, West Chester, PA 19383, (215) 436-2380 or 436-2530.

### Special Subjects Seminar II Instrumental Music in the Late 18th Century

MHL 480-32–3 Credits
July 18–22
Fee: 95.00 workshop fee plus tuition
This workshop presents the forms and literature of instrumental music in the late 18th Century. Included are the basic instrumental forms from solos, sonatas, concertos through chamber music and symphonic developments. The workshop will present guest performers and lectures to provide analytical skills and techniques for listening to a representative number of compositions from the literature of music for instruments.
For more information, contact Dr. Constantine Johns, West Chester University, West Chester, PA 19383

## Instrumental Music

### Special Subjects Seminar – Woodwind Repair

AIM 429-41–1 Credit
August 1–2
Fee: $35.00 plus tuition charge for 1 credit
The care, maintenance and repair of woodwind instruments taught by a practicing

repairman. Participants will receive hands-on experience in instrument terminology, the use of repair tools, and standard and emergency repair procedures.

For more information, contact Dr. Edward A. Barrow, School of Music, West Chester University, West Chester, PA 19383, (215) 436-2439.

### Special Subjects Seminar – Brass Repair

AIM 429-42 – 1 Credit
August 1–2
Fee: $35.00 plus tuition charge for 1 credit

Hands-on workshop in the care, maintenance and repair of brass instruments. Instrument terminology, the use of repair tools and standard and emergency repairs will be demonstrated by a practicing repairman.

For more information, contact Dr. Edward A. Barrow, School of Music, West Chester University, West Chester, PA 19383, (215) 436-2439.

## Keyboard Music

### Piano Teachers Workshop

The Keyboard Department plans to offer a workshop for private piano instructors during July of 1988. The details and format of the workshop are currently being developed. Plans call for a three to five day schedule modeled after the very successful workshop which was presented during July of 1986. Clinicians for the sessions will be drawn from the department and from outside specialists in the field. Specific dates, personnel and session offerings will be submitted at the earliest possible date.

For more information please refer to the filed schedule of the July, 1986 Workshop or contact Dr. Jacques Voois, Acting Chairperson, Keyboard Department, Studio 18, Swope Hall, West Chester University, West Chester, PA 19383, (215) 436-2380 or 436-2628.

## Music Theory and Composition

### Jazz Practices

MTC 416 – 2 or 3 Credits
June 27–July 1
Fee: $95.00

Nationally known jazz artists will offer classes in stage band direction, contemporary improvisation, arranging, and pedagogy of improvisation. The workshop is designed for anyone interested in the study of jazz, both instrumental and vocal, and will accommodate all age groups and all levels of ability.

For more information, contact Dr. James D. Sullivan, School of Music, West Chester University, West Chester, PA 19383 (215) 436-2628.

### Contemporary Application of Keyboard Synthesizers

MTC-417 – 2 or 3 Credits
July 24–29
Fee: $110.00

Hands-on workshop in which basic analog and digital programming techniques will be examined, focusing on the Yamaha DX-7 digital synthesizer. The use of these synthesizers in consort, via MIDI networks, will also be studied.

For more information, contact Dr. James Sullivan, School of Music, West Chester University, West Chester, PA 19383, (215) 436-2628.

## Vocal and Choral Music

### Concert Choir Tour of Romania and Bulgaria

VOC 429-31 – 3 Credits
VOC 429-32 – 2 Credits
July 14–August 1
Fee: To be determined

The Concert Choir will present concerts in several cities in Romania and Bulgaria. Plans include visits to schools where participants may meet with music students for an exchange of music and other aspects of our cultures.

For more information, contact Lois Williams, Director of the Concert Choir, School of Music, West Chester University, West Chester, PA 19383, (215) 436-2247.

## Physical Education

### Practical Relaxation Techniques

PED 498-21 – 1 Credit
May 31–June 3

Practical training in elementary (easy to use and apply) techniques of relaxation. Techniques include stretching, breathing, meditation, progressive relaxation, visualization, massage, and mild exercise. Emphasis: A relaxed approach to relaxation.

For more information contact Dr. Paul K. Smith, Human Performance Research Laboratory, West Chester University, West Chester, PA 19383, (215) 436-2764.

### Workshop Data Analysis Using SAS for Exercise and Sports Science

PED 498-22 – 2 Credits
June 6–10
9:00 a.m.–1:00 p.m.

The "How To" approach for signing on the mainframe computer, basic editing with XEDIT, and selected SAS operations will be used to learn some elementary techniques for setting up matrices of variables, creating SAS files, writing statistical procedure statements, running SAS programs, and interpreting SAS output. Participants will have the opportunity to analyze data from their respective disciplines using any or all of the following procedures (and possibly others): frequency and cross tabulation tables, univariate statistics, correlations, analysis of variance and covariance, and regression formats. These techniques have applications in most areas of academic life including grading, research, coaching, business, sport sciences, thesis work, and Likert scale evaluation. Some familiarity with computers and the statistical techniques of interest is desirable.

For more information contact Dr. Paul K. Smith, Human Performance Research Laboratory, West Chester University, West Chester, PA 19383, (215) 436-2764.

### Qualitative Skill Analysis

PED 498-23 – 2 Credits
June 13–17

Elementary analysis of human motor skills using a practical qualitative (non mathematical) approach. Participants will learn to analyse skills of their own choosing with the aid of a ½ inch video recorder (you must provide your own videotapes) and basic kinesiological principles.

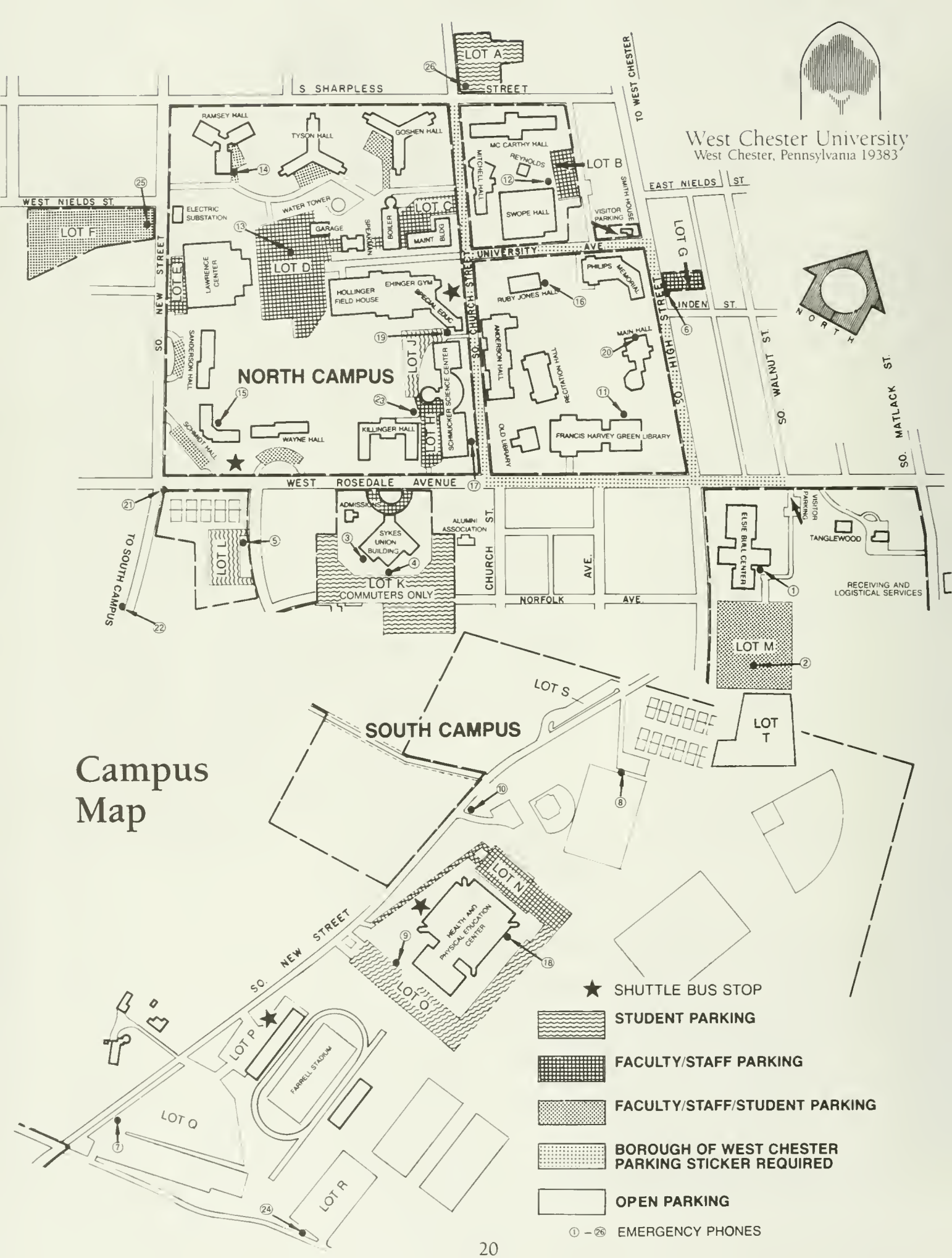
For more information contact Dr. Paul K. Smith, Human Performance Research Laboratory, West Chester University, West Chester, PA 19383, (215) 436-2764.

## Non-Discrimination/Affirmative Action Policy

West Chester University is committed to providing leadership in extending equal opportunities to all individuals. Accordingly, the University will continue to make every effort to provide these rights to all persons regardless of race, religion, sex, national origin, ancestry, age, marital status, sexual orientation, handicap, or veteran status. This policy applies to all members of the University community including students, faculty, staff and administrators. It also applies to all applicants for admission or employment and all participants in University-sponsored activities.

This policy is in compliance with federal and state laws, including Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendment of 1972, Section 504 of the Rehabilitation Act of 1973 and Executive Order of the Governor of Pennsylvania.

Any individual having suggestions, problems, complaints, or grievances with regard to equal opportunity or affirmative action is encouraged to contact the director of affirmative action in Smith House, 1st floor, (215) 436-2433.


West Chester University
West Chester, Pennsylvania 19383
Campus Map
NORTH CAMPUS
SOUTH CAMPUS
LOT A
LOT B
LOT C
LOT D
LOT E
LOT F
LOT G
LOT H
LOT J
LOT K
COMMUTERS ONLY
LOT L
LOT M
LOT N
LOT O
LOT P
LOT Q
LOT R
LOT S
LOT T
S SHARPLESS STREET
WEST NIELDS ST.
EAST NIELDS ST
UNIVERSITY AVE.
LINDEN ST.
WEST ROSEDALE AVENUE
NORFOLK AVE.
CHURCH ST.
SO. NEW STREET
SO. CHURCH STREET
SO. HIGH STREET
SO. WALNUT ST.
SO. MATLACK ST.
TO WEST CHESTER
TO SOUTH CAMPUS
RAMSEY HALL
TYSON HALL
GOSHEN HALL
MC CARTHY HALL
REYNOLDS
MITCHELL HALL
SWOPE HALL
SMITH HOUSE
VISITOR PARKING
WATER TOWER
ELECTRIC SUBSTATION
GARAGE
SPEAKMAN
BOILER
MAINT BLDG
LAWRENCE CENTER
HOLLINGER FIELD HOUSE
EHINGER GYM
SPECIAL EDUC
RUBY JONES HALL
PHILIPS MEMORIAL
SANDERSON HALL
SCHMIDT HALL
WAYNE HALL
KILLINGER HALL
SCHMUCKER SCIENCE CENTER
ANDERSON HALL
RECITATION HALL
OLD LIBRARY
MAIN HALL
FRANCIS HARVEY GREEN LIBRARY
ADMISSIONS
SYKES UNION BUILDING
ALUMNI ASSOCIATION
ELSIE BIRL CENTER
TANGLEWOOD
RECEIVING AND LOGISTICAL SERVICES
HEALTH AND PHYSICAL EDUCATION CENTER
FARRELL STADIUM
NORTH
SHUTTLE BUS STOP
STUDENT PARKING
FACULTY/STAFF PARKING
FACULTY/STAFF/STUDENT PARKING
BOROUGH OF WEST CHESTER PARKING STICKER REQUIRED
OPEN PARKING
① – ㉖ EMERGENCY PHONES

# SUMMER SESSION CALENDAR

| SESSION | DATES— Week Ending | APRIL 2 | 9 | 16 | 23 | 30 | MAY 7 | 14 | 21 | 28 | JUNE 4 | 11 | 18 | 25 | JULY 2 | 9 | 16 | 23 | 30 | AUGUST 6 | 13 | 20 | 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRE | Mail Registration April 11-May 13 | | | ▒ | ▒ | ▒ | ▒ | ▒ | | | | | | | | | | | | | | | |
| | In-Person Registration April 11-May 20 | | | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | * | | | | | | | | | | | | | |
| | Session Dates May 31-June 17 | | | | | | | | | | ■ | ■ | ■ | | | | | | | | | | |
| REGULAR | Mail Registration April 11-June 3 | | | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | | | | | | | | | | | | |
| | In-Person Registration April 11-June 10 | | | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | * | | | | | | | | | | |
| | Session Dates-June 20 July 29-Holiday July 4 | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | |
| POST | Mail Registration April 11-July 15 | | | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | | | | | |
| | In-Person Registration April 11-July 22 | | | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | ▒ | * | | | | |
| | Session Dates August 1-August 19 | | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | |

KEY: ▒ Scheduling and Payment Period ■ Sessions *Late Registration ($15 Late Fee)

## SUMMARY

PRE SESSION
Mail Registration Deadline-May 13
In-Person Registration Deadline-May 20
*Late Registrarion ($15 Late Fee)-May 26

REGULAR SESSION
Mail Registration Deadline-June 3
In-Person Registration Deadline-June 10
*Late Registration ($15 Late Fee)-June 16

POST SESSION
Mail Registration Deadline-July 15
In-Person Registration Deadline-July 22
*Late Registration ($15 Late Fee)-July 28

## Departmental Telephone Numbers

| | |
|---|---|
| **College of Arts and Sciences** | (215) 436-3521 |
| Anthropology/Sociology | 436-3500 |
| Art | 436-2755 |
| Biology | 436-2538 |
| Chemistry | 436-2631 |
| English | 436-2822 |
| Foreign Languages | 436-2700 |
| Geology/Astronomy | 436-2727 |
| History | 436-2201 |
| Mathematical Sciences | 436-2440 |
| Philosophy | 436-2841 |
| Physics | 436-2497 |
| Psychology | 436-2945 |
| Speech Communication and Theatre | 436-2500 |
| **School of Business and Public Affairs** | 436-2824 |
| Accounting | 436-2236 |
| Business Administration | 436-2304 |
| Criminal Justice | 436-2647 |
| Economics | 436-2134 |
| Government and Planning | 436-2343 |
| Social Work | 436-2527 |
| **School of Education** | 436-2321 |
| Childhood Studies and Reading | 436-2944 |
| Counselor/Secondary/Professional Education | 436-2958 |
| Instructional Media | 436-2233 |
| Special Education | 436-2579 |
| **School of Health Sciences** | 436-2825 |
| Communicative Disorders | 436-3401 |
| Health | 436-2931 |
| Nursing | 436-2219 |
| Physical Education | 436-2260 |
| **School of Music** | 436-2628 |
| History/Literature | 436-2739 |
| Instrumental Music | 436-2739 |
| Keyboard Music | 436-2739 |
| Music Education | 436-2739 |
| Theory and Composition | 436-2739 |
| Vocal and Choral | 436-2739 |

West Chester University
West Chester, Pennsylvania 19383

ADDRESS CORRECTION REQUESTED

Non-Profit Organization
U.S. Postage
PAID
West Chester, PA
19383
Permit No. 309

THIRD CLASS